A dissertation submitted to the Department of Environmental Sciences and Policy of Central European University in part fulfilment of the Degree of Doctor of Philosophy

ENVIRONMENTAL JUSTICE IN THE SLOVAK REPUBLIC: THE CASE OF THE ROMA ETHNIC MINORITY.

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Richard FILČÁK

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ABSTRACT

This dissertation is about the distribution of environmental benefits (e.g., access to natural resources) and harm (i.e., exposure to environmental threats) focusing on the Roma, an ethnic minority group in eastern Slovakia. The concept of environmental justice was used to shed light on the data gathered in this study. People are not equal in the distribution of environmental benefits and exposure to adverse environmental impacts. Social factors, like class and ethnic affiliation, play an important role.

The dissertation is based on field research in 35 Roma settlements (five settlements in two in-depth case studies and 30 other places using Rapid Rural Appraisal). The aim of the field research was twofold. The first consideration was to assess the distribution of environmental benefits and harm and the subsequent impacts on village populations. Four main patterns of environmental injustice were identified: exposure to hazardous waste and chemicals, vulnerability to floods, limitations on access to potable water, and waste management practice). The second consideration was to determine and analyze the social processes that contribute to the unequal distribution of environmental benefits and harm.

Competition and conflict in access to (and management of) natural resources between two groups of unequal social and political status (the ethnic group of Roma and their non-Roma neighbors) were then set forth as an explanatory framework. The main impact of the inequalities is the conceptualization of Roma village sections as "beyond the pale" spaces where environmentally controversial practices are (or may be) gradually concentrated.

The dissertation concludes with policy recommendations on how to address the unequal distribution of environmental benefits and harm through strengthening the social and economic situation of Roma (but also non-Roma) in the village. The environment as a source of income, employment and social interaction is analyzed and discussed as a key factor in this respect.

Key words: Environmental justice, Roma, eastern Slovakia.

LIST OF ABBREVIATIONS AND ACRONYMS

Acquis (Acquis Communautaire) – The body of common rights and obligations which bind all the Member States together within the European Union. Applicant countries have to accept the Community acquis before they can join the union.

CEU – Central European University

EC – European Commission

ECRI - European Commission against Racism and Intolerance

EPA – Environmental Protection Agency

ERRC - European Roma Rights Center

EU – European Union

FoE - Friends of the Earth

FDI – Foreign Direct Investment

CEE – Central and Eastern Europe

GDP – Gross Domestic Product

IPC – Integrated Pollution Control

LA 21 – Local Agenda 21

LEAP – Local Environmental Action Program

MoE SR - Ministry of the Environment of the Slovak Republic

NUTS – Nomenclature des Unites Territoriales Statistiques or Sub-national administrative areas within the European Community

OECD – Organisation for Economic Co-operation and Development

PES – Payment for environmental services

PHARE – Pre-accession fund of the EU supporting implementation of the EU acquis and approximation with the union

PRSP - Poverty Reduction Strategy Paper

REC – Regional Environmental Center for Central and Eastern Europe

RRA – Rapid Rural Appraisal

SPACE - Social Policy Analysis Center Foundation

UK – United Kingdom of Great Britain and North Ireland

USA – United States of America

UN – United Nations

UNDP – United Nations Development Programme

WCED - World Commission on Environment and Development

WFD – Water Framework Directive

WRI - World Research Institute WSSD – World Summit on Sustainable Development (Johannesburg 2002)

WWF – World Wide Fund

WB – World Bank

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CHAPTER 1. INTRODUCTION AND RESEARCH OUTLINE

1.1. INTRODUCTION TO RESEARCH ON ENVIRONMENTAL JUSTICE AND ROMA

"Everyone should share in the benefits of increased prosperity and a clean and safe environment. We have to improve access to services, tackle social exclusion, and reduce the harm to health caused by poverty, poor housing, unemployment and pollution. Our needs must not be met by treating others, including future generations and people elsewhere in the world, unfairly"

(*A better quality of life: a strategy for sustainable development for the UK)*[1]

May 24, 1945 – It is 16 days after the end of World War II. Czechoslovakia has been liberated and among the first laws adopted by the newly formed government[2] is a directive on Governing Certain conditions of Gypsies,[3] where §2 states: "In villages where they [Roma] have dwellings in proximity to public, state-owned and other roads, the dwellings will be removed, placed separately from the village on distant places selected by the village" (Jurova 2002). This is neither the first nor the last attempt to regulate Roma[4] settlements and separate them from villages of non-Roma. As newcomers to villages with practically no resources to buy land, Roma were allowed to settle in places allocated by the non-Roma majority. Today we find Roma settlements on the outskirts of villages, separated from the majority population by roads, railways or other barriers, disconnected from water pipelines and sewage treatment.

[1] Available at: http://www.sustainable-development.gov.uk/uk_strategy/content.htm [Consulted 4 March 2003].

[2] Adopted by Expozitura Poverenictva Vnutra (Department of Interior Affairs of the newly formed government). It is an amendment to an older directive from April 1940, on Governing Certain Conditions of Gypsies.

[3] In Slovak: Uprava niektorych pomerov Ciganov.

[4] Because of the negative connotations of "Gypsy" (*Tsigan* in Slovak), I use Rom (plural Roma, adjective Romani), the term promoted by most Romani organizations and Roma. The English equivalent of Gypsy (*Tsigan*) has negative connotations in Slovakian, and in slang it means "bad behavior" (e.g., trying to fool someone or to cheat someone).

What role did environmental conditions play in the selection process when the majority decided where this unwelcome minority had to live? Is it an accident that Roma shantytowns[5] are next to a landfill, on contaminated land, or that they are regularly exposed to floods? Why do water pipelines end on the edges of their settlements, meaning that Roma have to walk kilometers every day just to collect potable water for cooking and drinking? Based on research for this dissertation I claim that there was (and, unfortunately, still is) discrimination in equal access to environmental benefits in eastern Slovakia and people are not equal when it comes to exposure to adverse environmental impacts.

Differentiated treatment may not only be about Roma, but they are the ethnic group in the front line in Slovakia when we analyze the unequal distribution of environmental benefits and harm among the people. Distribution can be analyzed from the perspective of environmental justice, which is defined here as the fair treatment of people regardless of ethnic origin or class in the distribution of negative environmental consequences from development plans and policies, industrial operations or natural disasters and as fair access to natural resources and a clean environment. Environmental justice is the recognition and involvement of stakeholders regardless of their economic status or ethnicity in development, implementation and enforcement of policies, programs and projects related to the distribution of environmental benefits and harm.

Around 500 people in Rudňany-Pätoracké of eastern Slovakia live in a zone endangered by landslides and surrounded by toxic waste from mining activities. More than 360 Roma from Hermanovce wake up in the morning in the settlement at the fork of a river which floods their houses regularly. In this dissertation I map out environmental conditions (against the background of the overall economic and social situation) in 35 Roma settlements. The question is whether the environmental conditions in Rudňany-Pätoracké or Hermanovce described above are an exception or if they confirm a broader occurence of environmental injustice. I am searching for the patterns of unequal treatment to find out whether — in addition to exposure to industrial hazards and floods — there is also unequal access to water and discriminatory patterns of waste management.

[5] The Slovakian name for these settlements is "*tabor"*, which could be translated as "camp". I prefer to use the term shantytown or informal settlement instead of ghetto. For elaboration on this terminology see the section 4.3.2. Roma shantytowns – a description.

What were (are) the social processes associated with environmental injustice? Why are some people (or groups) better off than others when it comes to the distribution of environmental benefits? In order to understand the present situation and identify ways to address the impacts of these inequalities we must understand the past and mechanisms related to the differentiated treatment. We have to see the problem of unequal exposure to environmental threats and limited access to resources in the context of development and development policies at the *macro* level of the global and nation-state level (e.g., social, environmental, economic policies and their impact on livelihoods). Yet any particular case of environmental injustice is deeply embedded in *micro* level relations on the level of communities and settlements, and these must be analyzed too before the whole picture can emerge.

There is no simple answer as to why there is environmental injustice. Environmental conditions in Roma settlements are just one of the indicators of failures of policies addressing the problem of poverty and social exclusion in marginalized groups, structural discrimination, and internal Roma problems. Environmental injustice is not an outcome of the "historical determination" of the Roma population to live in environmentally problematic places. They need to get a chance.

Poverty was a widespread phenomenon in many developed European countries in the 19th and early 20th century, but over a relatively short period of several decades countries succeeded in substantially improving the social situation of many inhabitants. It was outside conditions and opportunities that changed the life of people, and the outside conditions resulted partly from the pressure of marginalized groups. Applying this perspective to the Roma in marginalized settlements, we need outside assistance for the people; we need to provide them with opportunities while at the same time they need to work on their social inclusion. The environment (and environmental management) may be part of the problem but also part of the solution. It may provide employment and security, or become a common ground for cooperation, providing space for inclusion of minorities into broader society.

1.1.1. Environmental justice in the context of human rights and sustainable development

Environmental justice research provides an opportunity to explore connections between environmental problems and the economic and social aspects of development and to analyze the role of the environment in the context of human rights. Environmental justice, therefore, is intimately linked with the promotion of both sustainable development and human rights. Furthermore, while the environmental justice movement can be said to originate in the United States, seeking justice in the distribution of environmental harms and benefits is a worldwide phenomenon with a long history that has recently found expression in the North and South debates around poverty and development. Environmental movements emphasizing justice, for example, have been especially popular in postcolonial regions such as India.

In the context of sustainable development, environmental justice is emphasized as intergenerational continuity of environmental resources and poverty reduction. "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" is the most common definition of sustainable development, put forward in the Brundtland Report (WCED 1987). The report also contains two key concepts: the concept of "needs", in particular the basic needs of the world's poor, to which overriding priority should be given; and the idea of limitations on the environment's ability to meet present and future needs.

Environmental justice contributes to the discourse on sustainability with a few important questions. One is centered on how to avoid compromising the ability of future generations to meet their own needs if present generations are living in poverty and marginalization that result in unequal exposure to environmental harms and differentiated access to environmental benefits. Another is how to produce sustainable economic growth within the framework of limited natural resources and sustainable political practices while relieving poverty, creating equitable standards of living, and satisfying the basic needs of all people. And last but not least, what are the necessary steps to avoid both irreversible environmental damage in the long-term; and short-term gain for some at the expense of others?

A clean and safe environment, and access to natural resources are basic human rights. The UN General Assembly Resolution 45/94 declared "that all individuals are entitled to live in an environment adequate for their health and well-being". This was the outcome of persistent efforts by the environmental movement to establish the right to a clean environment as a universal human right. As of 2004, as many as 53 nations included the provision of such a right in their constitutions (including the Slovak Republic). Principle 3 of the 1994 Draft Declaration of Principles on Human Rights and the Environment establishes a foundation for environmental justice: All persons shall be free from any form of discrimination in regard to actions and decisions that affect the environment. Principle 4 states that all persons have the right to an environment adequate to meet equitably the needs of present generations and that does not impair the rights of future generations to meet their needs equitably.

The UN Habitat Agenda calls for access for all people to safe drinking water, sanitation and other basic services, facilities and amenities, especially for people living in poverty, women, and those otherwise belonging to vulnerable and disadvantaged groups. Furthermore, in 2002 The United Nations Human Rights Committee passed General Observation No. 15, which recognizes the right to water as an indispensable factor for human dignity, and links this basic right to life and health[6] .

Agenda 21 is a program of the United Nations (UN) related to sustainable development[7]. According to Agenda 21, one of the principles of sustainable development is combating poverty, while the long-term objective of enabling all people to achieve sustainable livelihoods should be based on an integrating factor that allows policies to address issues of development, sustainable resource management and poverty eradication simultaneously. The goal is to improve the social, economic and environmental quality of human settlements and the living and working environments of all people, in particular the urban and rural poor, through providing adequate shelter for all, and integrated provision of environmental infrastructure: water, sanitation, drainage and solid-waste management.

[6] The Committee for Economic, Social and Cultural Rights. General Observation No. 15 (2002), "The right to water"(Articles 11 and 12 of the International Charter on Economic, Social and Cultural Rights). Geneva, 11-29 November, 2002.

[7] Available at: http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm [Consulted February 4 2007].

The Millennium Development Goals (MDGs), to be achieved by 2015, are eight goals that respond to the world's main development challenges[8]. From an environmental justice perspective, Goal 1 (Eradicate extreme poverty and hunger) and Goal 7 (Ensure environmental sustainability) are of particular importance. While Goal 1 calls for a 50% decrease in the proportion of people living on less than a dollar a day and those who suffer from hunger, Goal 7 promotes the integration of the principles of sustainable development into country policies and programmes; a reversal in the loss of environmental resources; a reduction (by half) in the proportion of people without sustainable access to safe drinking water; and significant improvement in the lives of at least 100 million slum dwellers by 2020.

The Charter of Fundamental Rights of the European Union sets out in a single text, for the first time in the European Union's history, a whole range of civil, political, economic and social rights of European citizens and all persons residing in the EU[9]. Article 37 (Environmental Protection) proclaims that: A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development . The EU Sustainable Development Strategy (EU SDS) reflects this, and its guiding policy principles (solidarity within and between generations) are focused on the need to address the needs of current generations without compromising the ability of future generations to meet their needs in the European Union and elsewhere. Priority is given to a reduction of the number of people at risk of poverty and social exclusion by 2010.

The overall tenor of these various agreements is that there can hardly be sustainable development without the protection and implementation of human rights, and that we cannot achieve sustainable development for some at the expense of others. This applies to the North–South divide, where sustainable development cannot be reached through exploitation of the poor counter and misusing them, but it also applies on the European, regional or local level, where part of the population may enjoy a clean and safe environment, while others will bear unequal share of the adverse effects of consumption and production patterns.

There is a gradually developing, strong international and national framework for human rights encompassing environmental issues and linking the protection of human rights with

[8] Available at: http://www.un.org/millenniumgoals/ [Consulted 5 February 2007].
[9] Available at: www.europarl.europa.eu/charter/pdf/text_en.pdf [Consulted 4 February 2007].

sustainable development. Cases of environmental injustice have to be seen in these two contexts: (i) people (regardless their ethnic origin or class) have the right to a clean and safe environment and fair access to natural resources; and (ii) sustainable development means that the needs of some people must not be met by treating others unfairly, including future generations. Research on environmental justice can contribute to understanding the human rights–sustainable development nexus. It contributes to understanding the origins, mechanisms and impacts of differentiated treatment and creates a basis for analyzing how to prevent inequality in the distribution of environmental benefits and harms (often linked with conflicts) at the international, country, regional or local levels.

1.1.2. Contribution of the research

The problem regarding the distribution of environmental benefits and harms is a rather new topic in Central and Eastern Europe (CEE). The environmental and social or economic discourses generally run in parallel, and there is little by way of existing literature or projects trying to connect the problems of poverty, ethnic discrimination, and access to environmental benefits or exposure to environmental harms. The exception is the problem of housing, where the European Roma Rights Center (ERRC) and other non-governmental organizations include access to water and sanitation in their public advocacy for equal treatment. They do it, however, more from a social perspective.

Problems of the Roma and other marginalized groups often cover the environment as well, but the concept of environmental justice is still virtually unknown in the region, and the environmental problems are only unsystematically listed among the other problems the communities face. There is little existing literature on environmental justice and Roma in CEE, and the current research (to my best knowledge) is a pioneering effort to approach the complicated nexus of poverty–discrimination–environment.

Environmental factors have not been systematically evaluated in the literature when studying the dynamics of the shantytowns' locations. Discrimination in the access to environmental benefits (i.e. clean water and safe environment) needs to be put into the context of the overall economic and social situation of the marginalized groups. There is a need for more

comprehensive, detailed, and systematic data on the role of discrimination in the distribution of environmental harms and benefits in CEE. Facilitated by applying an environmental justice framework, this dissertation may be seen as one of the steps towards this end. It helps to document discriminatory practices in multiple environmental arenas (pollution exposure, flooding, access to water, etc.). The work also raises the issue of how environmental injustice creates further environmental degradation not just in putting the people "outside," but also violating sound environmental practices there, too, because the "normal" or "usual" rules of operation do not apply (I will refer to this as "beyond the pale" syndrome) .

The research contribution is both theoretical and practical. From a theoretical perspective, the research attempts to reconsider the concept of environmental justice (as it has been developed in the American and UK literature) in light of field research in marginalized Roma communities. The forms and scope of unequal treatment are systematically identified, analyzed and described with special attention to the impacts on affected communities. I attempt to shed light on the social processes associated with unequal distribution of environmental benefits and harm and explore ways for a more just distribution of environmental benefits and harm.

At the practical level, this research identifies cases of environmental injustice, maps out the impacts of unequal exposure to environmental harms and differentiated access to natural recourses, and shows how social injustice is transformed into environmental harm and the creation of environmental "hot spots". The research outcomes strengthen the arguments for activities and steps that address the problems of marginalized communities. Environmental justice expands the discourse on environment and provides opportunities to look at not only the problem of discrimination against Roma communities, but the problematic situation of people living on the margins of society in general.

1.2. OVERVIEW OF THE RESEARCH PROBLEM

Negative impacts from industrial production and development do not affect everyone in society evenly. Environmental risks and the distribution of adverse effects of development have a tendency to be imposed more on those who do not posses adequate resources for their

own protection or are discriminated against because of their origin. As Beck (1999) claims: "the first law of environmental risk is – pollution follows the poor". For the poor who are also discriminated against because of their ethnic affiliation and already experience social exclusion from society, the environment may represent yet another form of discrimination, discrimination for which we may use the term environmental justice (or injustice).

The aim of this dissertation is to explore, describe and analyze examples, forms, roots and causes of environmental injustice in eastern Slovakia, and to discuss ways to address them. The Roma ethnic minority is at the center of this attempt. To understand the cases of environmental injustice we have to see them in a context of the social process on the *macro* level (e.g., the influence of the international context in formulating national policies and nation-state policies as such) and the *micro* level (e.g., role of communities, institutions and multiple stakeholders).

Based on his research on Chicago's waste policies and "garbage wars" from 1880 until 2000, David Pellow (2002) came up with four aspects important for understanding the mechanisms behind environmental injustice. He emphasizes: (i) The importance of the history of environmental racism and the processes by which it unfolds; (ii) The role of multiple stakeholders in these conflicts; (iii) The role of social stratification by race and class; and (iv) The ability of those least powerful segments of society to shape the contours of environmental justice struggles.

I see these four aspects as deeply interlinked and overlapping. History influences the present and shapes the institutional and informal frame in which decisions are taken nowadays. Understanding of historical and institutional inequalities of people of different class and ethnic origin shed light on the roots of the present cases of environmental injustice. Building on Pellow's work (Pellow 2002), I developed the following framework for analysis of environmental injustice cases in Slovakia:

- The macro-level of the nation-state: Economic, social and environmental policies, programmes and projects making unequal distribution possible;
- Historical matters: social processes associated with the distribution of environmental benefits and harm;

- The micro-level of communities: The roles of multiple stakeholders and institutions;
- Class and ethnicity: The role they play in the distribution and processes leading to distribution;
- External agencies: The role they play and could potentially play;
- Internal strengths and weaknesses: The ability of marginalized groups and individuals to influence the distribution of environmental benefits and harm and to formulate environmental justice struggles.

This framework helps to understand the processes and roles of stakeholders and institutions on different levels in enabling cases of environmental injustice. Environmental injustice is not an ad-hoc case of temporary disadvantageous distribution of environmental benefits and harm. It is rather an outcome of long-term structural discrimination and marginalization.

1.3. STUDY FOCUS

This dissertation focuses on the identification and analysis of examples, forms and causes of environmental injustice in Slovakia as mapped and described in two case studies (involving five settlements) and 30 other randomly selected Roma shantytowns. It discusses cause-and-effect relationships in the development of unequal treatment and outlines options for addressing environmental injustice. The research focused on the Roma ethnic minority as the most vulnerable group in the country. Their situation and environmental conditions were analyzed vis-à-vis the situation and conditions of the non-Roma majority.

The key research was done in two in-depth case studies, where the history of environmental injustice, social processes, the role of stakeholders, and class and race effects on the distribution of environmental benefits and harm were studied. Rapid rural appraisal of a random sample of 30 other settlements provided background data for the findings and for understanding of the forms and scope of the environmental injustice. The research outcomes are based on analysis in villages with Roma shantytowns in eastern Slovakia, but given similarities within the Central and Eastern Europe (CEE) region they may be valid also for other countries.

Through a case-study approach using qualitative methods (including participant observation and semi-structured open-ended interviews), and rapid rural appraisal methodology, the study analyzes the distribution of environmental benefits and harm between Roma and non-Roma. The main purpose of the study is to map out patterns of unequal distribution, to interpret the origins and analyze the social processes associated with the cases of environmental injustice.

1.4. KEY RESEARCH QUESTIONS

In the pilot research stage (conducted prior to the main research) I identified two cases of unequal distribution of environmental harm (the cases of Rudňany and Hermanovce). Based on the initial data I formulated two groups of key research questions:

(1) Can the situation in some of the Roma settlements be described as environmental injustice? If so, what are the forms and scope of the unequal treatment, and what are the impacts on the affected communities? If there are inequalities, then why? What are the social processes associated with the unequal distribution of environmental benefits and harm?

Objective 1: Describe the cases, nature and impact of environmental injustice.

Objective 2: Identify and analyze (in historical perspective) local social processes at the community level related to cases of environmental injustice.

Objective 3: Describe and analyze the role of multiple stakeholders and the institutional structures that govern and control the distribution of environmental benefits and harm.

Objective 4: Analyze the framework of the nation-state level and the role it plays in environmental injustice.

Objective 5: Determine how unequal distribution influences communities.

(2) What steps can be taken to move towards a more just distribution of environmental benefits and harm?

Objective 1: Identify policies (on the community and nation-state level) for addressing environmental justice (top-down approaches).

Objective 2: Identify steps to be taken in community development and capacity building of the affected people (bottom-up approaches).

1.5. THE RESEARCH SETTING

Slovakia, one of the European Union's new member states, is a country facing many social, economic and environmental problems affiliated with rapid reforms of policies, global economic development and domestic pressures. Environmental pressures, a high poverty rate and growing regional disparities are among the most significant problems at the local level.

The region of the country where the transformation impacts and affiliated problems are most visible is eastern Slovakia, which is a rather diverse region. There are two popular national parks in the north (High Tatras Mountains and Slovak Paradise), an extensive east-Slovak basin in the southeast, and forest areas in the central part. Industrial production has been traditionally concentrated in the Middle-Spis region around the town Spišská Nová Ves, with a long record of mining, metal processing and industrial production dating back to medieval times.

After the Second World War, the mining, metal-processing and chemical industries were given priority in planning and investment. As a result, there are many environmental "hot spots" of old environmental liabilities in the region. The most important industrial and business centers today are Prešov (textile and timber), and Košice (iron mills, metal processing). Traditional agriculture, which is in decline, has been gradually replaced by the tourist industry as the fastest growing segment of the economy.

The region is among the poorest in the European Union. It belongs to *Nomenclature des Unites Territoriales Statistiques* (NUTS) II category according to the European Union classification and consists of two counties: Prešov and Košice[10]. These counties have the highest share of population dependent on social assistance (16.1% and 18.9% respectively) in Slovakia, with unemployment rates above 20%. Average monthly income of a household member in Prešov County is the lowest in the country[11]. In January 2004 the average registered unemployment rate in Slovakia was 16.6%, in the capital Bratislava it was 3.7% while in the Košice region it was 23.4%[12].

The latest data on the size and conditions of the Roma communities in Slovakia are from the 2004 survey carried out by a group of sociologists from the Social Policy Analysis Center (SPACE) Foundation and Institute for Public Affairs Bratislava with the support of the World Bank and Canadian International Development Agency. The survey, conducted for the office of the cabinet's plenipotentiary for Roma communities, indicates that 320,000 Roma live in Slovakia in 1,575 integrated and segregated settlements[13]. Most of them are located in eastern Slovakia, where there is also the highest concentration of segregated settlements.

Out of the identified 619 segregated Roma settlements in Slovakia, as many as 418 are located in the eastern part of the country. In this poor region Roma are the poorest of the poor. Social stratification is high, and a significant number of Roma live in the absolute poverty of rural shantytowns. There are Roma settlements in these areas with almost 100% unemployment; people are unable to afford basic utilities (e. g., water, electricity or heating) or even food.

Field research (as the main source of qualitative data for this work) was done in the eastern part of the Slovak Republic in the period 2003-2005. The core of the field work is in two case studies, involving five settlements. These are Pätorackė and Zabíjanec settlements in the case study of Rudňany, and communities in Hermanovce, Jarovnice and Svinia in the Upper Svinka Watershed case study.

[10] NUTS - Nomenclature des Unites Territoriales Statistiques or Sub-national administrative areas within the European Community.
[11] In the case of Košice, better macro-data are influenced by the performance of Košice city, which is the regional hub and the second largest city in the country.
[12] Source: Web site of the Slovak Ministry of Employment, Social Affairs and Family (www.employement.gov.sk) [Consulted 21 January 2005].
[13] For more information see Juraskova et al 2005.

The selection of the case studies is the outcome of the initial literature review and a pilot study conducted prior to the main research. To evaluate whether these case studies have the potential to be applied more generally, rapid rural appraisal (RRA) methodology was used on a broader sample of 30 other (randomly selected) marginalized Roma communities in eastern Slovakia. The selection of eastern Slovakia as the territory for research was based on the starting assumption that due to the high density of Roma population, economic and social problems, and clear segregation of Roma settlements from the main villages, it will be easier to document there specific forms of environmental discrimination. These could be specific not only for the region but also for the Slovak Republic (or Central Europe) and its ethnic Roma minority.

1.6. OVERVIEW OF CHAPTERS

This dissertation is divided into nine chapters. The first chapter provides an introduction to the dissertation, research questions, the general outline, the background and the justification for the research. The theoretical framework of environmental justice and entitlements is discussed in chapter 2. In chapter 3, I describe the study approach methodology of the research, field methodologies, and data analyses and validation which were used throughout the research. It provides information about how the research was planned and conducted and how I selected places for case studies and regional research.

Chapter 4 discusses the origin, social processes and historical aspects of the formation of Roma communities vis-à-vis the majority population. The chapter aims to explain specifics of the Roma ethnic minority in relation to their vulnerability to environmental injustice. Attention is paid to the origin, definition and phenomenon of segregated Roma shantytowns. The chapter provides background for the analysis of the present social, economic and environmental conditions of Roma and environmental conditions in eastern Slovakia's shantytowns.

Chapters 5 to 7 describe outcomes of the field research in selected Roma communities. Chapter 5 describes the village of Rudňany, Chapter 6 describes the Upper Svinka watershed region, and finally Chapter 7 provides a regional snapshot overview (using RRA) of 30

randomly selected Roma communities. Results of the regional research are aimed at validating outcomes of the case studies and provide an important context for the findings. These three chapters describe the data, information and facts gathered throughout the field research.

Chapter 8 summarizes the results of the research and interprets the data. Four patterns of environmental injustice are developed and social processes contributing to their occurrence analyzed. In the chapter I also discuss potential reasons behind the cases of environmental injustice and attempt to explain the differentiated treatment in the distribution of environmental benefits and harm through the theory of competition and conflict over natural resources.

Chapter 9 discusses development alternatives in settlements facing unequal treatment and outlines policy options and recommendations. The recommendations are divided into short-term measures needed immediately to address the difficult situation in some of the settlements; and longer term measures where the focus is on structural changes and exploring the poverty-environment nexus.

CHAPTER 2. THEORETICAL FRAMEWORK

I drew upon two sets of literature on environmental justice and entitlement to develop a conceptual framework that would allow me to address the two research questions. This chapter summarizes main points articulated in the literature and creates a framework for shedding light on the importance, origins, dynamics and outcomes of the uneven distribution of environmental benefits and harm.

The first part of the chapter traces the history and evolution of the concept of environmental justice. The origin, evaluation and definition of environmental justice and injustice are set forth. Approaches to understanding what is (and what is not) just in the distribution of environmental benefits and harm are analyzed. This part is primarily built on extensive literature from the United States where the term "environmental justice" seems to have been first used. Approaches from the United States are then discussed vis-à-vis literature from the United Kingdom, where several researchers and activists have applied the environmental justice framework to the analysis of marginalized groups' living environment.

The second part discusses the validity of the concept for Central and Eastern Europe and particularly Slovakia. The leitmotiv is that to be able to analyze specific forms and impacts of unequal treatment we have to understand specific economic, social and environmental conditions in a given state or region. Specific conditions in Slovakia contributing to the unequal distribution of benefits and harm are therefore outlined and discussed.

Small communities in rural areas (the location of the research) are dependent on natural resources and most of all on managerial rights over natural resources. Therefore, in addition to the environmental justice literature, there is a review of literature on entitlement over natural resources in the third part of the chapter. I see entitlement as a key factor in the formation of environmental injustice. Those who decide on the distribution of natural resources and rights to natural resources have the decisive word in community development. Unequal and/or restricted entitlement over natural resources is seen as a key factor in the explanation of inequality of the social situation among the stakeholders on the community level. The chapter concludes with a discussion of the points of agreement and links between the concept of environmental justice and entitlement to natural resources.

2.1. INTRODUCTION TO ENVIRONMENTAL JUSTICE

2.1.1. Environmental benefits and harm – the distribution and stakeholders involved

There are different perspectives we may take when talking about the distribution of environmental benefits and harm. We may look at the distribution from the global perspective, or from a perspective of the nation-state, region or settlement. We may consider among stakeholders not only people exposed to the unequal impact of industrial pollution, but also future unborn generations or non-human beings. In this section I explore some of these perspectives.

International distributive justice and the environment has increasingly appeared in discourses critiquing globalization. Terms like "ecological imperialism" or "environmental colonialism" are often used in this debate. Leading activists such as Walden Bello or Vandana Shiva, together with recognized international NGOs such as Greenpeace, Friends of the Earth International, and the Third World Network have pointed out the practice of countries and multinational companies shifting environmentally damaging production to developing countries, as well as the persistent exploitation of natural resources in those countries and devastation of the environment and local communities. Byrne *et al.* (2002) puts it like this:

> Environmental problems such as stratospheric ozone loss, climate change, and declining biodiversity have also underscored the international dimension of issues of environmental justice. While global environmental degradation has been the result of historical patterns of exploitative practices by the industrial elite, in most instances the consequences are or will be borne most heavily by poorer communities.

These facts contribute to the discussion of how to provide for more environmental justice in a global context. This is a significant challenge in a polarizing world and in an era where disparities in wealth and power are growing between developed and developing countries as well as within countries. Harper and Rajan (2002) have identified the following three ways in which rich countries of the global North exploit the ecology of poorer countries: (i) As a

source of raw materials for the North; (ii) As a sink where the North can dispose of pollution and environmental "side effects"; and (iii) Through "coercive conservation" as a preserve for wild ecosystems and biodiversity without consideration of the human communities living in or near wildlife habitats.

International environmental justice provides other arguments for any negotiated agreement on global environmental governance. North–South differences in the perception of sustainable development illustrate this point. Discussions at the World Summit on Sustainable Development in Johannesburg in 2002 revealed that for countries from the North, sustainable development means environmentally and socially supportable development (i.e. increased environmental protection without compromising on maintaining and increasing standards of living). In contrast, for the countries of the South, sustainable development is first and foremost an issue of equity and justice at the global level (including the right for them to develop their economies in the same way as the North did)[14].

Another perspective on how we may look at the distribution of environmental benefits and harm is the perspective of future generations and non-human beings. A hallmark event in the environmental movement was the report of the World Commission on Environment and Development issued in 1987 (known also as the Brundtland Commission). The Brundtland Commission "pleaded with governments to consider the time dimension in all their decisions and to weigh benefits in the present against losses in the future" (Sachs 2002).

In addition to the already famous definition of sustainable development as development "that meets the needs of the present without compromising the ability of future generations to meet their own needs", the Commission also stressed that "inequality is the planet's main environmental problem" (WCED 1987). Intergenerational rights for the environment can thus be seen as an intergenerational environmental justice issue. In this discourse, we are still in the realm of the human population, but there are also rights of other inhabitants of the planet. Some authors talk about "ecological justice" (Low and Gleeson 1998; Baxter 2000). Low and Gleeson (1998) define environmental and ecological justice as follows:

[14] See, for instance, the process of negotiations before the WSSD. Materials available at: http://www.johannesburgsummit.org/html/documents/documents.html [Consulted 22 November 2005].

> The struggle for justice as it is shaped by the politics of the environment . . . has two relational aspects: the justice of the distribution of environment among peoples, and the justice of the relations between humans and the rest of the natural world. We term these aspects of justice: *environmental justice* and *ecological justice*.

This is an important aspect of the discourse on environmental justice, since all the issues of social needs, environmental benefits and economic opportunities must be seen in the limits imposed by ecosystems supporting our survival on this planet. In this context Agyeman and Evans (2004) talk about sustainability as "the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems."

To summarize, environment-related justice may consist of three broad elements. It is justice towards future generations (or intergenerational justice), ecological justice (or justice related to non-human beings) and the distribution within the human space (intra-generational justice). In this work I focus on the last element. However, as I will explain later, in addition to distributive aspects, environmental justice should encompass also the dimension of procedural justice.

In this understanding of environmental justice I primarily build on extensive research and literature from the United States (and partly from the UK), where the question of distribution of environmental benefits and harm emerged from community struggles for a fair share of exposure to toxic substances and where this struggle has focused on the immediate improvement of living conditions of people living now and here.

2.1.2. Environmental justice: distribution and procedures

If we start with the assumption that nobody really needs a dirty or polluted environment to live in (unless we believe some people prefer this) and nobody really deserves this (unless we believe that an adverse environment should be a kind of punishment for a certain class or ethnic group) then environmental justice is about the just distribution of environmental

benefits and no discriminatory exposure to environmental harm. Environmental justice consists of two interlinked aspects: the distributive and procedural.

In this work I focus on environmental justice as a form of social distributive justice among human beings in the present time and within ecological limits. In addition, the procedural aspect (how people receive their share of benefits and harm) focuses on procedures associated with the allocation of environmental benefits and harm. Environmental justice is then fair treatment and recognition of all stakeholders in the processes related to distribution of environmental benefits and harm, while the distribution itself is done in a way that no social or ethnic group bears an unequal share of environmental harm or is blocked from accessing environmental benefits. Yet what are "just" and "justice" in the distribution and procedural processes?

The question of justice is as old as human civilization. It has been a central point of ideologies, regime justifications as well as protest movements and even revolutions for centuries. It was a driving force in the bourgeoise revolutions in Europe and in attempts to establish communist regimes. Yet conceptualizing the issue of justice in its variety of forms is no easy task. And even if we were to agree on what justice is, how can we promote it?

Since the early 1970s the issue of justice, especially social or distributive justice, has been at the center of attention in political philosophy (Baxter 2000). The cornerstone in these efforts is the breakthrough study by John Rawls from 1971, *A Theory of Justice*, which provides a comprehensive exploration of the principles of justice using the frameworks of liberty, distributive shares, duties and obligations and public good. According to Dworkin (1977), every plausible political theory has the same ultimate value, which is equality. In other words, all viable political theories are "egalitarian" theories. Kymlicka (1990) claims that this suggestion is clearly false if by "egalitarian theory" we mean a theory that supports the equal distribution of income. He puts it like this:

> Egalitarian theories require that the government treat its citizens with equal consideration; each citizen is entitled to equal concern and respect. […]. While leftists believe that equality of income or wealth is a precondition for treating people as equals, those on the right believe that equal rights over one's labor and property are a precondition for treating people as equals.

Inserting an environmental dimension into Kymlicka's division between the left and right schools of political thought, environmental justice may be seen from the "leftist" as well as from the "rightist" perspective. The leftist perspective would be that inequality in income and wealth contributes to the marginalization of those worse-off when it comes to distribution of adverse environmental impacts. The rightist perspective, on the other hand, would be that individuals do not have equal rights over their properties i.e., they are not able to influence external environmental conditions having a direct impact on their property or life.

While I do not deny the importance of property rights for better access to environmental benefits and for better protection again environmental harm, I think that the core problem is inequality in income and wealth contributing to environmental injustice. In a situation where marginalized people have practically no access to property rights and minimal chance for horizontal mobility is an outside assistance for increasing equality of income or wealth a precondition for treating people as equals. Distributive justice is the basic condition for the procedural aspects of distribution.

Procedural justice is usually (in most schools of thought) defined as a concept involving the fair, moral, and impartial treatment of all persons, especially in law. It is often seen as the continued effort to do what is "right", where the "right" is determined by consulting the majority, employing logic, relying on cultural and historical patterns of behavior and/or values or referring to divine authority.

Distributive justice concentrates on just outcomes, while procedural justice concentrates on just processes. Environmental justice encompasses, in my understanding, both distributive and procedural dimensions. It is fair treatment of all people regardless of class or color in procedural decisions relevant to the distribution of environmental benefits and harm. At the same time, leveling the social disparities in income and wealth is essential for addressing marginalization of those worse-off when it comes to the distribution of adverse environmental impacts.

To summarize, environmental justice is justice in distribution and procedures associated with it. Addressing environmental injustice then means how to reach distributional justice through

procedural justice in a way defined by Vilfredo Pareto in his Pareto improvement[15]: A change that can make at least one individual better off, without making any other individual worse off. If a hazardous waste facility is not built in a poor marginalized neighborhood but in an area away from the majority of people (or is not built at all because of waste reduction projects, or introduction of cleaner production), nobody may be worse off, but lots of people may be better off. If Roma from marginalized settlements gain equal access to potable water it is not decreasing anybody else's access to the water in a country like Slovakia, which possesses an abundance of this natural resource. It is not always possible to reach a "zero-sum game" and some people may lose (e.g., it may simply not be possible to find a place for a municipal landfill that would not affect anybody). It is important that any such decision is reached with the involvement of all relevant stakeholders, discussion of pros and cons of different alternatives, and with compensation for the losers.

2.1.2. The roots of the environmental justice concept

Understanding environmental justice as an intra-generational issue (as a form of social distributive justice among human beings in the present time and within ecological limits) is close to the concept of environmental justice as developed in communities' struggles in the United States. Although the approaches from the US may not adequately apply to the specific historical, social and cultural context of Eastern Europe, they provide an important theoretical background and information.

The theoretical framework of environmental justice as it emerged in the United States is strongly linked to the environmental justice movement. As Kurian (2000) observes: "They [environmental justice movements] seek to bridge the concern for social justice and equity with resource management and environmental policy concerns." At the beginning of the 1980's, environmental justice emerged as a concept in the United States. Pointing to a particular date or event that launched the environmental justice movement is impossible, as the movement grew organically out of dozens, even hundreds, of local struggles and events and out of a variety of other social movements (Cole and Foster 2000, Shelton 1999).

[15] See for instance: Pareto, V. 1976. *Sociological writings*. Lanham, MD: Rowman & Littlefield. Other good source is: Powers, C., 1987. *Vilfredo Pareto (The Masters of Sociological Theory)*. London: SAGE Publications.

Nevertheless, there are several cases often mentioned as milestones, including the Houston Northwood Manor protest against sanitary landfill (1978), the Warren County, North Carolina, case (protest of African Americans against a toxic waste dump in 1982), or Triana in Alabama, where a tiny all-black community was contaminated with DDT from the Redstone Arsenal Army base (1983).

These (and other) cases are often labeled as a watershed events of the protest movement seeking to address inequalities in the distribution of negative impacts of environmentally damaging activities (Bullard and Johnson 2000, McGurty 2000).Another case related to the movement's beginnings took place in Love Canal, New York[16]. Love Canal serves as a landmark case in the fight for clean communities and the protection of public health at risk from environmental problems (Robinson 2002). This case brought the anti-toxics movement into national prominence. President Jimmy Carter declared Love Canal a disaster area and evacuated residents of a housing development.

2.1.2.1. From the bottom up: How environmental justice was born in America.

Cases such as the one in the Warren County and subsequent academic studies showed that the socially disadvantaged and/or members of a minority ethnic group are more likely to be exposed to environmentally problematic infrastructure such as toxic waste dumps. In large part, their vulnerability is due to limited political organization, discrimination or lack of resources for effective participation in decision making. Hockman and Morris (1998), in his analysis of studies conducted by Hofrichter (1993), Bryant and Mohai (1998), came to the conclusion, that:

> [Notably] in a comparison among those studies where the effect of race were also included, race was, in six studies, the more dominant factor in predicting exposure to toxins, while social class had, in three studies, the greater impact.

The 1987 breakthrough study, *Toxic Waste and Race,* sponsored by the United Church of Christ, concluded that "race was the central determining factor in the distribution of chemical

[16] In this case, houses were built on abandoned toxic waste dump.

hazard exposure in the United States" (Bowen and Wells 2002). However, it concluded that class played an important role as well. In 1990 Robert Bullard published *Dumping in Dixie: race, class, and environmental quality* as the first textbook on environmental justice (Bullard 1990). Building on the study and growing evidence of links between class, race and pollution, the United Church of Christ Commission for Racial Justice co-organized (in 1991) the *First National People of Color Environmental Leadership Summit*. The proceedings put forth the following definition of environmental justice:

> Environmental Justice – is the fair treatment of people of all races, cultures and income with respect to the development, implementation and enforcement of environmental laws, regulations, programs, and policies. Fair treatment means that no racial, ethnic or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from the operation of industrial, municipal, and commercial enterprises and from the execution of federal, state and local, and tribal programs and policies.

The environmental justice movement has been growing and has stimulated (besides political campaigns and activism) also a number of studies which have attempted to verify or question the ling between pollution and social factors in its distribution. One of the breakthrough studies was done by Bullard (1993) who reaches the following conclusion:

> [That] 60% (15 million) of African-Americans live in communities with one or more abandoned toxic waste sites. Of the nation's licensed commercial landfills, 60% are located in predominantly African-American or Latino-American communities. This accounts for 40% of the nation's total estimated landfill capacity.

Increasing scientific evidence and the growing influence of the movement had an impact on government activities. Firstly, President Clinton's Executive Order 12898 on *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*[17] was adopted and forms the basis for regulating the activities of the US Environmental Protection Agency. Secondly, the executive order led to the development of a broad EPA program on environmental justice and to the development of a Draft Environmental Justice

[17] Executive Order 12898 (EO 12898), dated February 11, 1994.

Strategy[18]. Last but not least, the federal government allocated money for addressing cases and impacts of industrial hazards (the Superfund). Nevertheless, as one EPA official points out, this is still considered to be only the beginning, and there is a need for substantial research on correlations between class, race and pollution and allocation of more funds for remediation of contaminated sites[19].

2.1.2.2. Comparison of US with UK experience

As new forms of environmental discrimination and injustice are reported and analyzed, the scope of the mainstream environmental justice movement as developed in the US has gradually become too narrow. Stephens has observed that:

> Activists and academics in the US have led the way in developing the environmental justice approach. This has generated valuable insights and provided an effective basis for informed activism. However, despite a recent move towards tackling "transportation equity" the USA's focus has mostly been on tackling pollution from landfills and industrial sites (Stephens *et al.* 2001).

This focus may be partly seen as an outcome of the specific cases which formed the basis of the movement and partly as a logical decision of the movement leaders to concentrate on cases where it is relatively easier to provide evidence linking pollution and ethnic and/or social factors. The US environmental justice movement has inspired further research and activism in the United Kingdom, which took a slightly different scope and approaches. It also generated academic disputes and questioning of American approaches to the environmental justice.

According to Stephens *et al.* (2001), the main limitations of the U.S. approach is too much emphasis on cases of environmental injustice in localized geographical areas, ignoring the fact that environmental justice is a global and inter-generational issue. Analyzing the American

[18] The United States' Environmental Protection Agency defines Environmental Justice as the "fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations, and policies" (EPA 2002). The draft strategy of environmental justice was developed in 1996 (EPA 1996).
[19] Personal interview. In Washington, March, 2004, at EPA Office of Solid Waste and Emergency Response.

literature on environmental justice I tend to disagree that it does not extensively incorporate global issues. There is relatively extensive concern among the U.S. scholars about the impacts of U.S. policies on other countries and equity in distribution of environmental impacts from these activities (e.g., Berman 1996, Bandy 1997, Gedicks 1993, Geisler and Essy 2000, BI 2002, Schosberg 2004). The other part of the claim (too much focus on the local level) may be seen as being as much a strength as a weakness.

The strength is that it provides support for the mobilization of people on the local level and the ability to influence the decision-making process when it comes to "real world" cases. The weak part is that it may see cases of environmental injustice as isolated extreme cases, instead of system failures. Focus on the local level versus a more "global" approach to the concept of environmental justice has roots in the different origins and the background of the discourse. "There is no comparable Civil Rights movement [in the U.K.], just a well-organized if very unrepresentative environmental movement" (Agyeman 2002). The dimension of justice, equity and rights is therefore put on the agenda by different people representing (often) different stakeholders.

Cole and Foster (2000) describe how environmental justice struggles in the US are often led by people with no political organizing or activist experience before a particular toxic struggle. "It is a common story in the anti-toxics movement, in which residents, primarily women, are galvanized to action by threats to their health, their families, and their communities". Contrary to the US situation, cases of community struggles for equal treatment in the distribution of environmental harm in the UK are led by professional environmental organizations with highly educated staff and international expertise (e.g., by Friends of the Earth England, Wales and Northern Ireland, and by Friends of the Earth Scotland[20]) As described by Agyeman (2002):

> There are currently at least three different constructions of environmental injustice [In the UK]. These are outlined in terms of access to the countryside among those from ethnic minority groups, Friends of the Earth England, Wales and Northern Ireland's "Pollution Injustice" campaign and Friends of the Earth Scotland's Campaign for Environmental Justice."

[20] There are two separate (but closely collaborating) branches of Friends of the Earth International in the U.K. It is Friends of the Earth England, Wales and Northern Ireland; and Friends of the Earth Scotland.

The attention of Friends of the Earth was focused on Integrated Pollution Control (IPC) sites[21]. Their report showed that 662 of the sites coming within the IPC system in England and Wales are located in areas with household income of less then £15,000, whilst only five are in areas where average household income is above £30,000 (FoE 2001). An interesting point in constructing environmental justice in the UK is broadening the focus to embrace the distribution of environmental benefits (e. g., access to the countryside among those from ethnic minority groups). However, in all these cases, issues of environmental injustice are discussed at a state or regional level without any clear target for action. From this perspective we may label the UK approach more "top-down" in comparison to the variety of environmental justice protests on the grassroots' level in the US. Nevertheless, the results of studies conducted by the Friends of the Earth in the UK and in Scotland have confirmed the US experience that communities lacking economic and political power are the most likely to be selected as sites for dumping waste and pollution (Stephens *et al.* 2001; Scandrett 2000). Abandoned factories and industrial sites are most likely to be left in poor communities and to attract marginalized underclass newcomers.

The report *Environmental Quality and Social Deprivation* commissioned by the Environmental Agency of the UK (Walker *et al.* 2003) came to the conclusion that the three main areas of environmental quality and social deprivation in England are (i) flood hazard; (ii) integrated pollution control sites; and (iii) air quality. The indicative tidal and fluvial floodplain maps produced by the authors were used to relate to ward deprivation data. The outcome is that the tidal floodplain analysis shows a clear relationship with deprivation. Of the population living within the tidal floodplain there are eight times more people in the most deprived decile compared to the least deprived[22]. IPC sites analysis confirms Friends of the Earth's conclusions that for the UK there is strong evidence of a socially unequal distribution of IPC sites and associated potential impacts. Out of the 3.6 million estimated people living within 1 km of an IPC site, there are six times more people from the most deprived decile compared to the least deprived.

[21] Operators of the most potentially polluting processes ("prescribed processes", which are specified in the amended Environmental Protection (Prescribed Processes and Substances, Regulations 1991/472) have to apply for prior authorization from the Environment Agency to operate the process. IPC requires operators to consider the total impact of all releases to air, water and land when making an application. More information at: http://www.advisorybodies.doh.gov.uk/comeap/statementsreports/goodpracticeguide.pdf [Consulted february 2 2007].

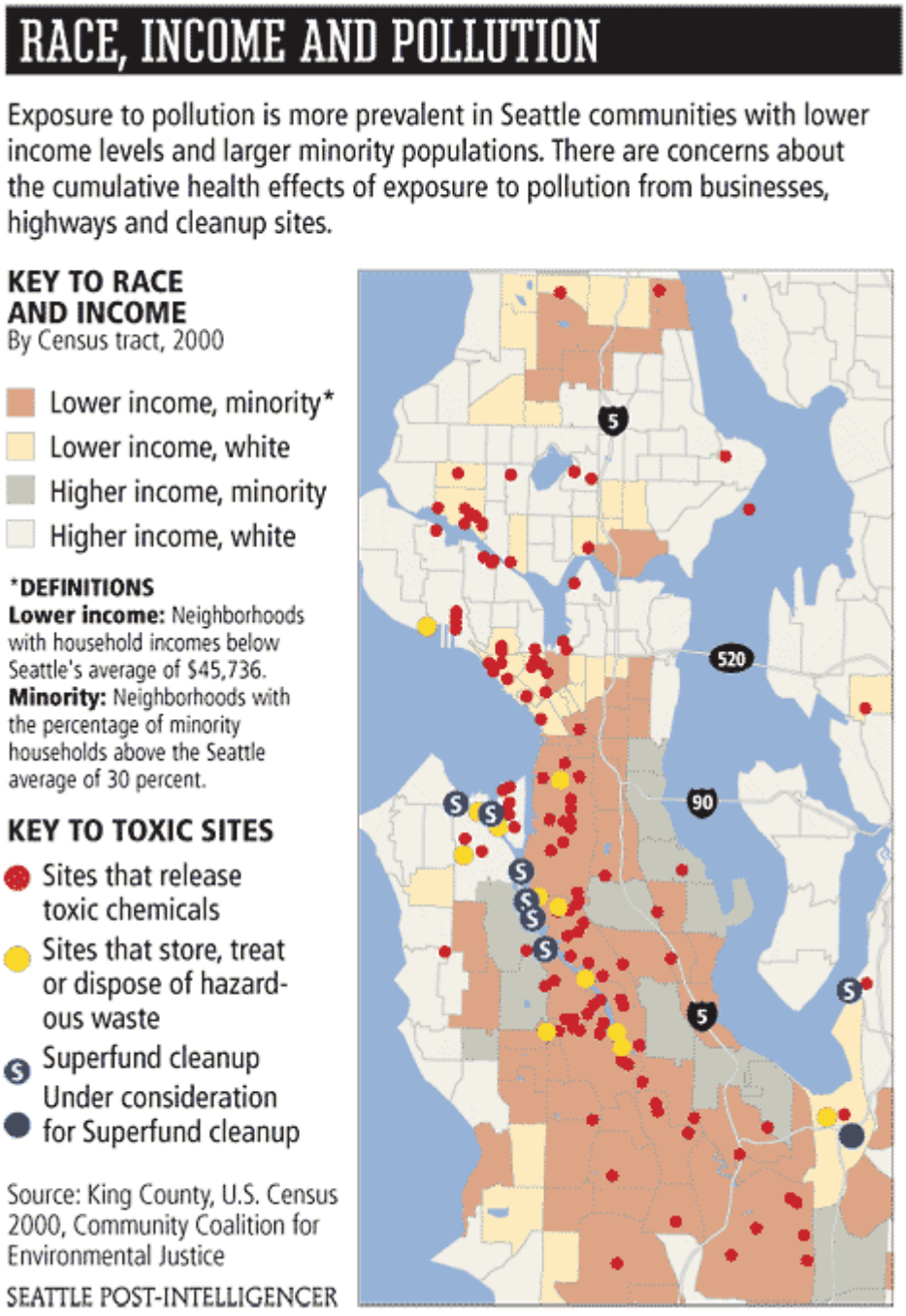
[22] The deciles provide 10 ranked groupings of wards, from the 10% most deprived to the 10% least deprived.

The experiences from the United States and UK illustrate different ways of constructing environmental justice and point to the importance of local conditions in analyzing the forms and scope of unequal treatment. They also highlight the importance of history and the organization of civil society in forming policy responses for addressing cases (and especially roots) of environmental injustice. Approaches developed in the UK provide inspiration for how to better construct environmental justice and how we may look at forms other than toxic waste of unequal exposure to harm or access to environmental benefits. On the other hand, the American experience illustrates the importance of the connection between grassroots activism and science in addressing the case of environmental injustice.

2.1.2.3. Race and class factors

Is environmental justice predominantly about race discrimination or is it more connected to the class status of the affected people? Is it mostly a race or class phenomenon, or both? In either case we are talking about groups disadvantaged by developers, decision-makers, or simply by the more powerful and influential segments of society. Or as Pellow (2001) summarizes, those stakeholders who are unable to mobilize resources (political, economic, etc.) will most likely bear the brunt of environmental inequalities. Poverty and exclusion based on racial discrimination are effective inhibitors of mobilization. The studies suggest that (at least in the case of the US) race is more important than class (Bullard 1993; Bryant and Mohai 1998; Novotny 2000; BI 2002; Byrne et al 2002). In the studies conducted in the UK it is more a class phenomenon (Agyeman 2002; Walker *et al.* 2003). It seems that the importance of class and race depends on case-specific circumstances and settlements patterns. As the figures on exposure to environmental risks in Seattle indicate (Figure 1), the effects of race and class are sometimes possible to evaluate simultaneously in one place.

Figure 1. Race, income and pollution: exposure to pollution in Seattle communities



Source: Seattle Post - Intelligencer

Yet very often boundaries between different social and ethnic groups are unclear and the communities are mixed. It is then difficult to distinguish what plays the more important role. I

see race and class as two deeply interlinked aspects of the same problem. Both class and race are key factors contributing to environmental injustices. However, in relative terms race may be a stronger driver in marginalization and discrimination since poor people may have better networks and access to their well-off neighbors and decision makers of the same ethnic origin.

The race factor was definitely more important in the case of the United States during the formation of the environmental justice movement. Cases of unequal treatment have created a civic response that may be seen essentially as a continuation of the civil rights movement, since it is deeply linked with movements for racial justice and anti-discrimination. According to Novotny (2000), the movement is historically embedded in past struggles (housing, labor, civil rights) and frames the environment and the environmental justice movement with language that recognizes and reinforces connections between environmental justice and these struggles. Thousands of these groups used and continue to use direct action protest to effectuate their demands[23] (Cole and Foster 2000), which are therefore known as "bottom-up" protests, and demands for equality.

2.1.3. Participation and recognition

In the previous parts I focused more on the distributive aspect of environmental justice. Yet an equally important part is the procedural aspect (Dobson 1998; Schlosberg 1999). There are three conditions relevant in this respect: (i) a good policy and legislative framework; (ii) strong institutions with well-defined competencies; and (iii) recognition of the participants' diversity. While the first two conditions are often in place, the third is the crucial one when we analyze distribution of environmental benefits and harm. Rhodes (2003) point out to the problem of lack of participation by some communities in the environmental policy- and decision-making process, and the very serious asymmetry of governmental and private sector response to the environmental concerns and demands of minority and low-income communities. Pellow (2001) emphasizes institutional inequality as a major driver of environmental injustices.

[23] They are only loosely organized under several national umbrella organizations (for instance in *Citizens Clearinghouse for Hazardous Waste*).

Rhodes (2003) and Pellow (2001) amplify a very important problem: that it is not enough to have institutions and mechanisms for participation in decision making in place. It is also important who has access to these institutions and how voices of the politically weaker groups are heard and reflected in the decisions. Or as Amanda Wolf and Ian Macduff put it: "[environmental justice] is not simply a result of proper State institutional design, but arises out of the process by which environmental disputes are negotiated (Macduff and Wolf 1999).

The environmental justice movement started with the demand for equality in the distribution of environmental harm. Yet, besides *inequality*, we must speak about *recognition* of the diversity of the participants and experiences in the environmental justice movement. This is often not put into practice and theorists and practitioners often highlight either the former or latter aspect (Schosberg 1999). Schosberg (1999) continues with the suggestion that the environmental justice movement, through its focus on both the distribution of environmental ills and the recognition of the communities involved, contains within it the potential to move beyond this theoretical impasse in political practice.

This perspective of looking at environmental justice not only as a problem, but also an opportunity is very important. Firstly, it provides space and opportunity for recognition, empowerment and involvement of marginalized groups in the procedures relevant to the distribution of environmental benefits and harm. Secondly, environmental justice with its focus on distribution and procedures leading to the distribution may provide what Macduff and Wolf (1999) call "middle ground", where the logic of private (e.g., market transactions) and public (e.g., parliament or administration) decision processes overlap. This middle ground may provide space for merging environmental and social goals together in a way that they will reinforce each other. As Harvey (1999) puts it: "The coupling of the search for empowerment and personal self-respect on the one hand with environmental goals on the other means that the movement for environmental justice twins ecological with social justice goals in quite unique ways". This makes the environmental justice movement cross-sectoral and broad enough to engage groups and individuals with various backgrounds in the environmental dispute.

Cases of environmental injustice often start as a problem of justice in procedures associated with the distribution of environmental benefits and harm. Institutions are biased, politically weaker groups are not heard and neglected in the decision making process, and the decisions

are manipulated by those with networking, power and financial capital. This could be especially relevant for countries that lack a tradition of pluralism and sport a weak record of public involvement in decision-making processes (e.g., countries of Central and Eastern Europe). Yet environmental justice may also provide grounds for participation, recognition and merging environmental and social goals.

2.1.4. Access to environmental benefits

In the discourse on environmental justice we talk about the distribution of environmental benefits and harm. The prevailing approach in the US and the UK is focused on the former aspect (i.e., how environmentally problematic facilities are built, what is the special distribution of pollution). Environmental benefits are (usually) not explicitly mentioned, but it is assumed that clean air and uncontaminated soil and water are part of the quest for equality in bearing impacts of environmental harm.

However, we may look at environmental benefits from the perspective of impact of industrial production and consumption. Two areas emerging in the literature and agenda of international and domestic organizations are access to water and access to nature.

Access to clean water is one the most pressing global problems and there is no shortage of literature, programmes and projects on it. The United Nations' Millennium Development Goals aim to reduce by half the proportion of people without sustainable access to safe drinking water, especially in developing countries. However, also in the developed countries access to water may represent a substantial problem for some people. A closer look at how access to potable water or municipal water supplies is differentiated based on class or race may shed some light on the problem of equality in access to this natural resource.

The Rural Community Assistance Partnership in its study *Without the Basics in the 21st Century Suntil Living: Analyzing the Availability of Water and Sanitation Services in the United States* (RCAP 2001) analyzed access to water among the population in the US, with special attention to poor people and ethnic minorities. Based on the census data from 1990 and 2000, the study came to the conclusion that the proportion of people who live without

access to basic water and sanitation services is statistically small — 0.64 percent of all US households. But that 0.64 percent translates into 670,986 households, representing more than 1.7 million people who lack complete plumbing facilities. Not surprisingly, many of the people affected are the poorest of the poor, living in sparsely populated rural areas or in densely populated urban areas. The study also revealed a higher number of the affected people among ethnic minorities.

Another area where we find the focus of the recent environmental justice research is access to the countryside. Agyeman (2002) in his account of the construction of environmental justice in the UK identified as one interesting aspect access to the countryside by those from ethnic minority groups. This stream of research may also be relevant for Central and Eastern Europe, where extensive privatization of agricultural land and forest may create gross inequities in a short time.

2.1.5. Environmental justice and Central and Eastern Europe

The debate about the causes of environmental problems and the distribution of adverse effects of industrial production in CEE has been delayed and simplified in comparison to the Western World, mainly because of political oppression, as well as limited access to literature, information and contacts with the "outside" world. Nevertheless, even in this environment there were cases in CEE generating public concern and discussions prior to the political changes in the late 1980s and early 1990s[24]. The early 1990s black and white picture of an unlimited market as the tool for solving all environmental (not even speaking about economic and social) problems has gradually been followed by disillusionment with the environmental and social impacts of development.

Although the environmental situation in CEE improved during the early stages of transition (mostly because of the decline in industrial production, and new environmental legislation

[24] See for instance the cases of "Black Triangle" in the border regions of Germany, Poland and Czech Republic, or the Danube River's Gabcikovo Dam and its role in the formation of Hungarian protest movements in the late 1980s. (Tickle and Welsh 1998, Pickvance 1998).

introduced partly through the EU accession process[25]), as industrial production started to grow, pressure on the environment again increased. In this development central Europe follows the "old" European countries paths' as described by Beck (1999):

> The past decade has shown that the dogmatic free-market economics imposed throughout the 1980s – and to which every world and nation forum has since signed up – has exacerbated environmental risks and problems just as much as central planning from Moscow ever did. Indeed free-market ideology has increased the sum of human misery.

In a similar vein, Dobson talks about the "super-ideology" of industrialism as the main opponent of sustainable development. From a purely eco-centric perspective, the differences between communism and capitalism are negligible. Both are based on permanent economic growth, expansion and bureaucratic control (Dobson 2000). At the more concrete level of particular issues, it is usually possible to state whether a sustainable approach is closer to a liberal, conservative, or socialist perspective. We may speak in this sense about command and control approaches to nature protection, against market-based economic incentives in the air protection realm, for instance. Yet the most problematic feature is that an understanding that there are limits to growth is virtually non-existent. This is the same for the former and present regimes in CEE.

The question arises: how are adverse impacts of industrialism distributed throughout the population? The official policy in the former socialist regime was that there were no poor people and conditions and opportunities were absolutely equal for all. Although these societies were relatively egalitarian, social stratification and marginalized groups nevertheless existed. The transition of the CEE economies has led to further impoverishment of groups and individuals with low adaptability to the new conditions (WB 2000; Emigh *et al.* 2001). People lacking education and marketable skills are those most hurt by the transformation (UNDP 2002; WB 2003). These people are poor, but are they also affected by unfair treatment when we analyze the adverse impacts of industrial development?

[25] EU environmental legislation is then mostly an outcome of the single European market concept. For more information on the EU environmental policy development, see, for instance, Barnes and Barnes 1999 or McCormick 2001.

The environmental justice analytical framework as developed in the United States, and as developed and broadened in the UK, provides an important point of departure for studying the environment of the ethnic and/or social minorities in countries of Central and Eastern Europe. Nevertheless, the social and demographic situations, history and patterns of settlements and policies are substantially different from the situations where environmental justice scholars have worked in both the above-mentioned countries. Therefore an adjustment and elaboration of the environmental justice framework is crucial before it can be applied to research in the region. As participants of the *1st* workshop *on Improving Environmental Justice in Central and Eastern Europe* we developed the following definition of environmental justice relevant for the CEE region in December 2004[26]:

> *A* condition of environmental justice exists when environmental risks and hazards and investments and benefits are equally distributed without direct or indirect discrimination at all jurisdictional levels and when access to environmental investments, benefits, and natural resources are equally distributed; and when access to information, participation in decision making, and access to justice in environment-related matters are enjoyed by all.

Taken together, these understandings of environmental justice encompass both distributive and procedural aspects and their universal validity. However, forms of the unequal treatment and social processes related to them differ from those in the United States or United Kingdom. Given the different geographical conditions, history, and level of social and economic development, they may also differ among the CEE countries.

[26] Organized by Centre for Environmental Policy and Law, Central European University, Budapest, Hungary. More information at: www.cepl.ceu.hu.

2.1.6. Refining the framework of environmental justice for Slovakia

According to the Constitution of the Slovak Republic: "Everybody has the right to a favorable environment."[27] But this does not necessarily mean that all people, regardless of class or race, have access to a fair share of environmental benefits (e.g., access to nature, safe sources of clean water and air) or are proportionally exposed to the adverse effects of environmental degradation (e.g., emissions, location of hazardous waste processing facilities, polluting industries). In order to test the viability of the environmental justice analytical framework and its applicability to the Slovak Republic, I have selected the Roma minority.

The concept of environmental justice as it emerged in the United States is concentrated on cases of siting new hazardous waste facilities or the problem of past environmental liabilities. While this was a valid starting point for analyzing cases of eastern Slovak Roma settlements, I realized that the forms of unequal treatment in this country might differ. Given the geographic conditions and regular presence of floods in the research area I added this to the list of potential forms. Access to water was added as an issue based on the initial discussions with people dealing with Roma communities. The following areas/problems were outlined as a hypothesis in the beginning and confirmed by the subsequent research:

Housing and floods (environmental conditions in the area before the Roma settled)
For the Roma, a basic human right – the freedom to move – is restricted. Since Roma are mostly unwelcome by the majority population, they are not free to settle in any place they choose, and are often pushed to leave their settlements (see ERRC 1998; WB 2000; UNDP 2002; ERRC 2002). As a result, many Roma have settled in villages located in rural areas and isolated from mainstream economic and political centers. Within the villages' territories they were allowed to settle in places designated by the majority population.

As an outcome, Roma rural housing may exist in areas which are unattractive to the majority population (e.g., in places that are devastated by industrial production, contaminated, regularly flooded or otherwise problematic from an environmental perspective), and thus are not considered suitable for commercial purposes or settlement by the majority population.

[27] Chapter 6 (The right for the protection of the environment and cultural heritage), Article 1 of the Constitution of the Slovak Republic, adopted as the Act No. 460/1992. Available at: www.nrsr.sk/main.aspx?sid=nrsr/dokumenty. [Consulted 21 March 2005].

Management of access to resources (conditions after the Roma settled)

Discrimionation against the Roma, their marginalization, and limited share of entitlements have resulted in missing political influence, lack of effective know-how for participating in decisions concerning their living environment and the allocation of resources for building infrastructure. This also limits their access to governmental and the EU funds, which are indispensable for constructing water supplies and sewage treatment.

Hostile municipalities may even block the inflow of grants for the Roma (Mušinka 2003; WB 2003a). Decisions on allocation and distribution of funds on the municipal level may favor the majority population. This is particularly the case for environmental infrastructure for water and sewage management. A discriminatory pattern of waste management in villages was added later based on the outcomes of the field research.

Specific conditions and the situation of Roma communities contribute to specific forms of unequal treatment in access to environmental benefits and exposure to environmental harm. Identifying and categorizing cases and forms of environmental injustice was the first step in my research. Yet how can we explain why Roma are exposed to different treatment in the distribution of the environmental benefits and harm and what are the ways to address their unequal distribution? These are the questions explored in the last part of the dissertation.

2.2. THEORY OF ENTITLEMENTS

Why are entitlements important and what role do they play in relation to the unequal distribution of environmental benefits and harm? I see entitlements over natural resources as one of the key factors in community development. Those who control resources in a village enhance their capabilities and social networks. Those who are excluded from these entitlements are restricted in their development of capabilities and may experience a weaker position in society. Entitlements were identified by Amartya Sen (1999) as the basic precondition for development of capabilities' expansion.

Sen seems to be the first to develop entitlement analysis. He is interested in how people gain and lose control over resources and points out that "starvation is the characteristic of some

people not *having* enough food to eat. It is not the characteristic of there *being* not enough food to eat. While the latter can be a cause of the former, it is but one of many *possible* causes" (Sen 1981). In this sense, lack of benefits from natural resources is not always a problem of scarcity of resources (e.g., clean areas for settlement or potable water), but can also be a problem of who has access and entitlement to use these resources. In this sense, entitlement rights govern access to natural resources and thus influence capabilities of different individuals and groups and their well-being. In the capabilities approach, well-being is seen as the freedom of individuals to live lives that are valued and lead to realization of human potential (Laderchi *et al.* 2003).

One can possess entitlement over certain resources through ownership (e.g., inheritance, production, trade), or through rights legitimated by laws and rules (e.g., nominated or elected representatives with decision-making power). Leach *et al.* (1999) elaborated on Sen's original concept of entitlement and came up with a distinction between endowments and entitlements, defined in the following way:

> Endowments refer to the rights and resources that social actors have. For example, land, labor, skills and so on. Entitlements…refer to legitimate effective command over alternative commodity bundles. More specifically, environmental entitlements refer to alternative sets of utilities derived from environmental goods and services over which social actors have legitimate effective command and which are instrumental in achieving well-being.

Sen (1981) and Leach (Leach *et al.* 1999) see entitlements as a strong driver of community development. Entitlements are assets helping communities and individuals. Those who have entitlements benefit; those who do not may suffer. Distribution of entitlements on the local level is also an important factor for the development of environmental injustice. It has significance in the cases where we have two (or more) groups competing over the resources, as is the case in villages in eastern Slovakia inhabited by Roma and non-Roma.

Entitlement definitions usually put this term in relation to property rights and law. But it may also mean unwritten rules of management of common pool resources. Webster's Dictionary defines entitlement as (i) the state or condition of being entitled or a right to benefits specified

especially by law or contract (ii) a government program providing benefits to members of a specified group (also funds supporting or distributed by such a program)[28]. For the purpose of my research, I am more interested in the first part of the definition, i.e., what are the states and conditions specified by formal (contract or law) and informal (e.g., unwritten decisions in a community) rules which govern management of natural resources and utilization of benefits from these resources.

While in the case of individual properties it is usually easy to define who is entitled to benefit from them, and there are extensive legal options for how to protect these entitlements, it is more complicated in the case of natural resources and environmental benefits. By studying entitlements and through understanding of mechanisms of their distribution we may better understand social processes and the development of communities.

2.2.1. Entitlements and environmental injustice

There are three main types of ownership in Slovakia: private, municipal and state property. My primary focus is on the system of distribution of entitlements in the case of municipal and state-owned and managed natural resources[29]. In theory, state and municipal land and properties belong to all people and should be utilized for the benefit of all. As elected bodies, municipalities should represent the interest of all inhabitants and distribute entitlements in the way that is beneficial for the whole community. Yet in practice entitlements are subject to political fights within the different communities, and the stronger groups may manipulate the distribution in their favor. Paraphrasing Sen, limited access to potable water is the characteristic of some people not *having* access to the water. It is not the characteristic of there not *being* enough water to drink.

Analyses of who is entitled to what, shed light on the social processes associated with environmental injustice. Entitlement reinforces stronger groups, while its lack further weakens those groups who are deprived of access. This process may then take the form of a vicious

[28] http://www.m-w.com/dictionary/entitlement [Consulted 12 October 2005]
[29] Roma rarely own even the land under their houses in shantytowns, and they practically do not own any agricultural land or forest in villages included in the research sample.

cycle where the situation of the weaker group further deteriorates. The stronger group may use entitlements to deprive the weaker groups of natural resources.

Allocation and distribution of entitlements is a dynamic process where history matters and present social processes have great influence. Who can decide about exploitation of natural resources and who is (and who is not) involved in the management of natural assets are strong influences on strengthening or weakening of groups and individuals. The relative strength or weakness of different social and ethnic groups may then be reflected in the way the environmental benefits and harm are distributed.

CHAPTER 3. STUDY APPROACH AND METHODOLOGY

The focus of the field research was to identify and map cases of environmental injustice and analyze social processes that generate inequalities in the distribution of environmental benefits and harm. A human rights framework was then adopted as the background for the analyses. As Witkin (2000) points out: merging human rights and research goals requires a shift from seeing the purpose of research as uncovering an existing "truth" to seeing it as a social practice that generates and legitimates "truths". For the purpose of the research I choose a combination of quantitative and qualitative data collection through field research, and analysis based on social science research methodology.

3.1. STUDY DESIGN

Quantitative and qualitative data were collected in the course of the research. Quantitative data provided the background and justification for framing the issue of environmental justice and understanding the scope and impact of the unequal treatment. However, the core activity in this research on environmental aspects of poverty, racial discrimination and social exclusion was qualitative research. The following two questions were crucial in the beginning of the research:

- *What* shall I research?
- *How* shall I do this research?

The former aspect is addressed by the proposed research methodology, designed to explore the following research questions:

(1) Can the situation in some Roma settlements be described as environmental injustice? If so, what are the forms and scope of the unequal treatment, and what are the impacts on the affected communities? If there are inequalities, then why? What are the social processes associated with the unequal distribution of environmental benefits and harm?

(2) What steps can be taken to move towards a more just distribution of environmental benefits and harm?

These research questions have formed the research strategy, which includes the following three steps:

1. *Preliminary research design* (definition of objectives, literature and information survey of the topic and area, formulation of hypotheses, sampling, methodology, examination of resources/time/finance);
2. *Pilot study* (test of the hypotheses, evaluation of methodology, assessment of sampling and initial data collection);
3. *Main research – case studies and regional research* (data collection and processing, analyses, conclusions and recommendation).

The study was focused on the Roma minority as a group likely to be disproportionately affected by negative environmental consequences resulting from development and likely disproportionately underrepresented in the distribution of environmental benefits.

3.1.1. Pilot study

Bless and Higson-Smith (2000) define a pilot study as "a small study conducted prior to a larger piece of research to determine whether the methodology, sampling, instruments and analysis are adequate and appropriate". The aim of my pilot study was to test the validity of the initial assumptions and better formulate hypotheses for the research. It also helped to refine the process I later used to gather data on social, economic and environmental conditions of Roma in the Slovak Republic. The goals of the pilot study (conducted in August and September 2004) were: (i) To evaluate the validity and scope of the initial hypotheses based on the initial data gathering (on the basis of data gathered during the pilot study, I planned to either modify these hypotheses or develop alternative ones); (ii) To assess the suitability of locations (i.e., settlements) for case studies on environmental justice and decide on the scope of the research (number and location of these case studies); to identify appropriate data

collection methods for the research; and to decide on data processing methods for the research. In the pilot study I particularly focused on:

- Determining the availability and accessibility of data on pollution and its environmental impacts on Roma and non-Roma settlements in the villages;
- Developing practical skills and personal capacities for conducting the research;
- Evaluating the validity of the theoretical framework and practical limitations of the proposed methodology; and
- Providing information on planning resources, time and finance for further research.

Results of the pilot study contributed to the main research design, methodology and siting. The pilot study using rapid rural appraisal methodology (described later in this chapter) and qualitative research techniques (i.e., participatory observations, semi-structured interviews) was conducted in two Roma communities. Both communities are situated in the eastern part of the country. The pilot study assessed the suitability of these sites for case studies and tested methodology for further research.

Community 1: Rudňany.
Located on the outskirts of the village of Rudňany, there are two Roma settlements in the village: Zabíjanec and Pätoracké. The former is built on a derelict factory site, while the latter is located on a toxic waste tip.

Community 2: Svinia.
Svinia village, a settlement of approximately 700 Roma people faces difficulties in providing the residents with running and drinking water. It is regularly flooded. The sources of water are local wells that do not qualify as potable.

These communities were selected based on the following criteria:

- Both communities represent the shantytown type of rural settlements;
- Each community will serve to test one of the hypotheses (i.e., housing and infrastructure);
- Both communities are accessible in the following respects: Distance – both communities are reachable within a day's travel from Budapest. Penetration – both communities are already targeted by NGO projects, which helps to find key informants and gatekeepers to

the communities. Communication – the language barrier should be limited since most of the Roma in these settlements should be able to communicate in Slovakian.

The pilot study results confirmed and modified the selection of the final locations for the main research phase. In the cases of Rudňany and Svinia, I collected initial evidence of the inequalities in the distribution of environmental benefits and harm. Both cases fulfill the characteristics of environmental injustice cases. I therefore decided to work on these two case studies in the main research phase. The first one is a case study of two Roma settlements in Rudňany (Zabíjanec and Pätorácké), while in the case of the second case study I decided to widen the scope and include (besides Svinia) also nearby Roma settlements in Hermanovce and Jarovnice.

The pilot study had also provided insights into the complex nature of majority-minority relations in the study areas and helped me to understand basic social processes on the community level. Research on the problems of the Roma community from the perspective of environmental justice is, to the best of my knowledge, a new approach in the CEE region. Based on the study I reformulated the objectives and scope of the research and adjusted the methodology for the main research.

3.1.2. Case studies

The aim of the case research is to understand the dynamics of the situation, the history and roots of the processes and their outcomes within a defined set of boundaries. A key challenge in constructing an acceptable case study research design is to ensure that the major questions of study are pertinent to the selected unit of analysis (Yin 1993).

We may be interested to learn about a particular case (intrinsic case study), or use the case study research to understand broader processes and dynamics, where our case study serves as an illustration and support for analyses and theories (instrumental case study). From this perspective the case studies in this research were designed from the very beginning to be of instrumental character and provide (together with the rapid rural appraisal) a better picture of reality in the case of the Roma in the Slovak Republic.

Several instrumental case studies may serve for comparative analyses of the same problem or phenomenon. This is the case in my field research, where the two case studies cover five Roma settlements. Field methodologies for case study research are often close to the methodologies of ethnologic research (e.g., participant observation). Yin (1993) distinguishes case study research from ethnographical research in the following way:

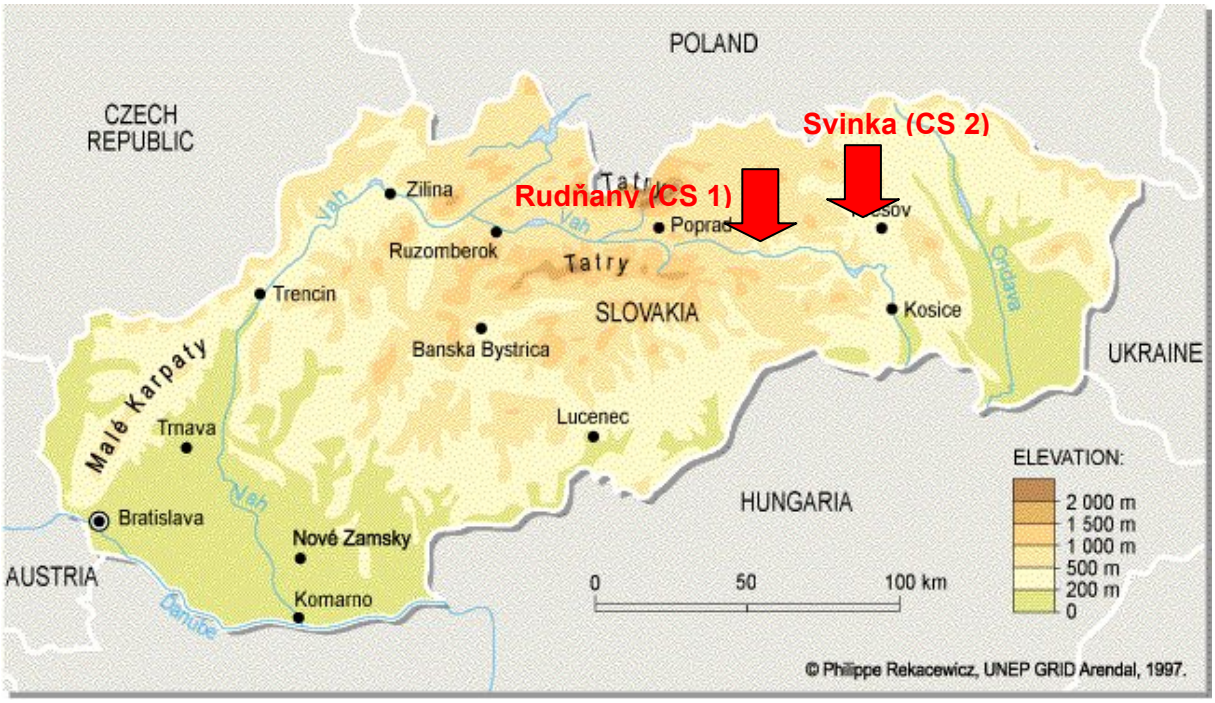
- Case study research is seeking to define specific questions ahead of time and emulate logical positivism in developing hypotheses and collecting evidence[30]. Ethnology seeks to gain a close-up, detailed rendition of the real world and challenge the logical positivism position by claiming that all evidence is relative and therefore cannot be independent of the investigator.
- Case study research is done in a targeted fashion – focusing on the evidence deemed relevant and doing the field research in a time-limited fashion. Ethnological approaches encourage the field work to continue for long periods of time in a reasonably unstructured manner.

From this perspective the research was based on the emulation of logical positivism and assumptions that case studies and regional research will support more general theories on the background of environmental injustice and discrimination. The empirical data from the research support and validate theories of environmental justice.

The cases were identified as typical or representative of other cases. Rudňany and the Upper Svinka River settlements were pre-selected in the pilot study as the appropriate locations for case study, while regional research was meant to validate this selection and put the case study findings into a broader picture of the regional context. The location of the case studies is illustrated in Figure 2.

[30] Social science research is usually based on the collection and analysis of empirical data. Findings and conclusions are then derived from these data. Logical positivism is the philosophical school of thought that espouses this practice, which is the foundation for the natural sciences (Yin 1993).

Figure 2 The Slovak Republic – eastern part: case studies and regional research location



Qualitative social science methods were used in the field research, while the focus of the research and data gathering was on social processes and the situation of the people within a broader context of macro-level policies and trends. Case study research elements and focus were adopted from Layden's (1993) classification and adjusted to eastern Slovakia conditions as identified from the pilot study:

- *Context or macro social organization:* Values, traditions, forms of social and economic organization and power relations. Entitlements over natural resources, forms of land ownership, state interventions, legal frameworks, state/municipal governance, history of majority/minority relations, pattern of settlement in the area, quantitative data on pollution levels and its spatial distribution;
- *Setting or intermediate social organization:* Work: Industrial and state bureaucracies, labor market, social work agencies, domestic labor, "shadow" economy. Non-work: Social organization of leisure activities (sport and social events), religious organizations, non-governmental organizations, and political parties. Overlaps and interlinks among work and non-work activities;
- *Social activity:* Face-to-face activities in the above context and setting. Is the activity divided along ethnic lines? Do the two groups cooperate and live with each other? What role (if any) does environment play in these activities?

- *Self-identity and the individual's social experience:* Influenced by the above sectors, this element addresses the unique personal experience of the individual. Individual perception of environmental problems/threats.

This research focus provided a blueprint for observations and framed questions that were used in the semi-structured and informal interviews. The aim was to describe selected case studies and identify social processes contributing to inequalities in the distribution of environmental benefits and harm. Individual methodologies are discussed in the following chapters.

3.1.3. Regional research

The regional research was aimed and designed to provide a snapshot overview of the situation of Roma settlements in the selected region of the Slovak Republic. Out of approximately 320,000 Roma in Slovakia, the majority live dispersed among the majority population in towns and villages, and around 128,000 live concentrated and/or segregated in three main types of settlements:

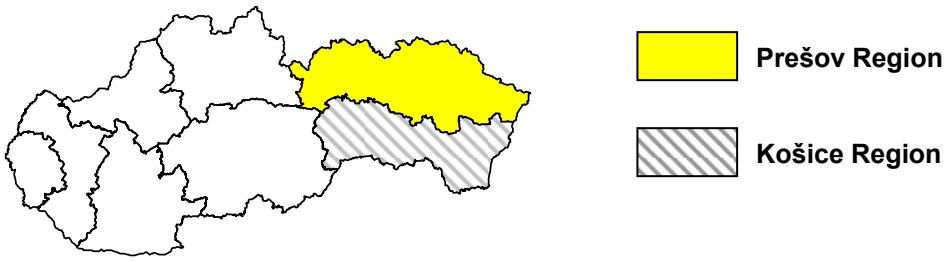
1. Concentrated in central parts of town, taking the form of a Roma street, or several blocks of apartments (168 settlements);
2. Settlements on the outskirts of a town/village, but within the boundaries (338 settlements);
3. Settlements spatially segregated from the town/village by distance, by a natural barrier, e.g., stream and/or forest, or by other barriers, e.g., behind the railway and/or road (281 settlements)[31].

For the purpose of research I omit settlements of the first type (Concentrated in central parts of town) due to the following factors. These settlements usually do not possess clear boundaries between Roma and non-Roma dwellings, and it is problematic to find any differences in the distribution of the environmental benefits and harm in the city centers. It is therefore difficult to find differences on this *micro*-level. I therefore focus on the second and

[31] All numbers are based on a 2004 survey of the SPACE Foundation and Institute for Public Affairs Bratislava. See Juraskova *et al* (2005) for more information.

third types of settlements. As illustrated in Figure 3 the settlements in the research sample belong administratively to two counties (Prešov and Košice). One of the questions for RRA was also if this administrative division makes any difference in the situation of Roma in marginalized settlements.

Figure 3. Administrative boundaries of the Košice and Prešov regions (eastern Slovakia)



The data from the 2004 survey provide a more accurate picture of the number of Roma shantytowns, and on the actual size of the Roma minority in the Slovak Republic. However, the research design is built on older data available at the time of my field study preparations (2002 – 2003). I received those data from the cabinet's Office of the Plenipotentiary of the Government for Roma Communities. There are no discrepancies in the typology; only the number of Roma settlements known prior to the 2004 mapping was smaller. I made my research sample based on 323 Roma segregated settlements of types 2 and 3 known prior to the detailed mapping in 2004 (226 in Prešov Region and 97 in Košice Region, making 323 total for eastern Slovakia)[32].

I decided to choose 30 settlements at random to be included in the research sample. To generate my set of random numbers I used the research randomizer developed by Social Psychology Network.[33] The criteria for generating a set of random numbers hwere the

[32] The 2004 survey identified 619 Roma settlements of these types (Prešov 338 and Košice 281), which translated into 418 places located in the Eastern Slovakia. The 95 Roma settlements not known prior to 2004, and therefore not included in the research sampling, are generally small communities (usually one to several families).

[33] The random numbers generator of the Social Psychology Network is available at: http://www.randomizer.org/index.htm. It is a service offered to students and researchers interested in conducting random assignment and random sampling [Consulted 4 January 2004].

following: (1) Generate one set of numbers; (2) 30 numbers per set; (3) Number range 1 to 323. Results of this sampling are summarized in the Table 1.

Table 1. RRA selection using random sampling

One set of 30 unique numbers per set Range: from 1 to 323 – unsorted
Set #1: 321, 92, 231, 292, 2, 83, 49, 5, 248, 64, 79, 115, 252, 28, 108, 90, 205, 9, 80, 257, 144, 69, 3, 236, 65, 89, 222, 36, 266, 296
Selected Roma settlements: 1. Jánovce; 2. Spišské Vlachy – Dobra Vôľa; 3. Zbudske Dlhé; 4. Uzovske Pekľany; 5. Dvorníky – Včeláre; 6. Humenne – Podskalka; 7. Helcmanovce; 8. Bardejov-Dlhá lúka; 9. Rokytov; 10.Mníšek nad Hnilcom; 11. Zborov; 12. Petrova; 13. Lenártov; 14. Krompachy; 15. Hažín; 16. Trebišov; 17. Spišské Bystré; 18. Medzilaborce – Palota; 19. Nižný Tvarožec; 20. Spišský Hrhov; 21. Chimianske Jakubovany; 22. Makrušovce; 23. Bystrany; 24. Sečovce; 25. Markovce; 26. Bystré; 27. Nižná Jablonka; 28. Snina; 29. Trhovište; 30. Nižná Slaná.

Rudňany village (Case Study 1) is administratively part of Košice county, while Jarovnice, Hermanovce and Svinia villages (Case Study 2) belong to Prešov county. In the case of the regional research, 16 settlements belong to the former and 14 to the latter county (See Figure 3).

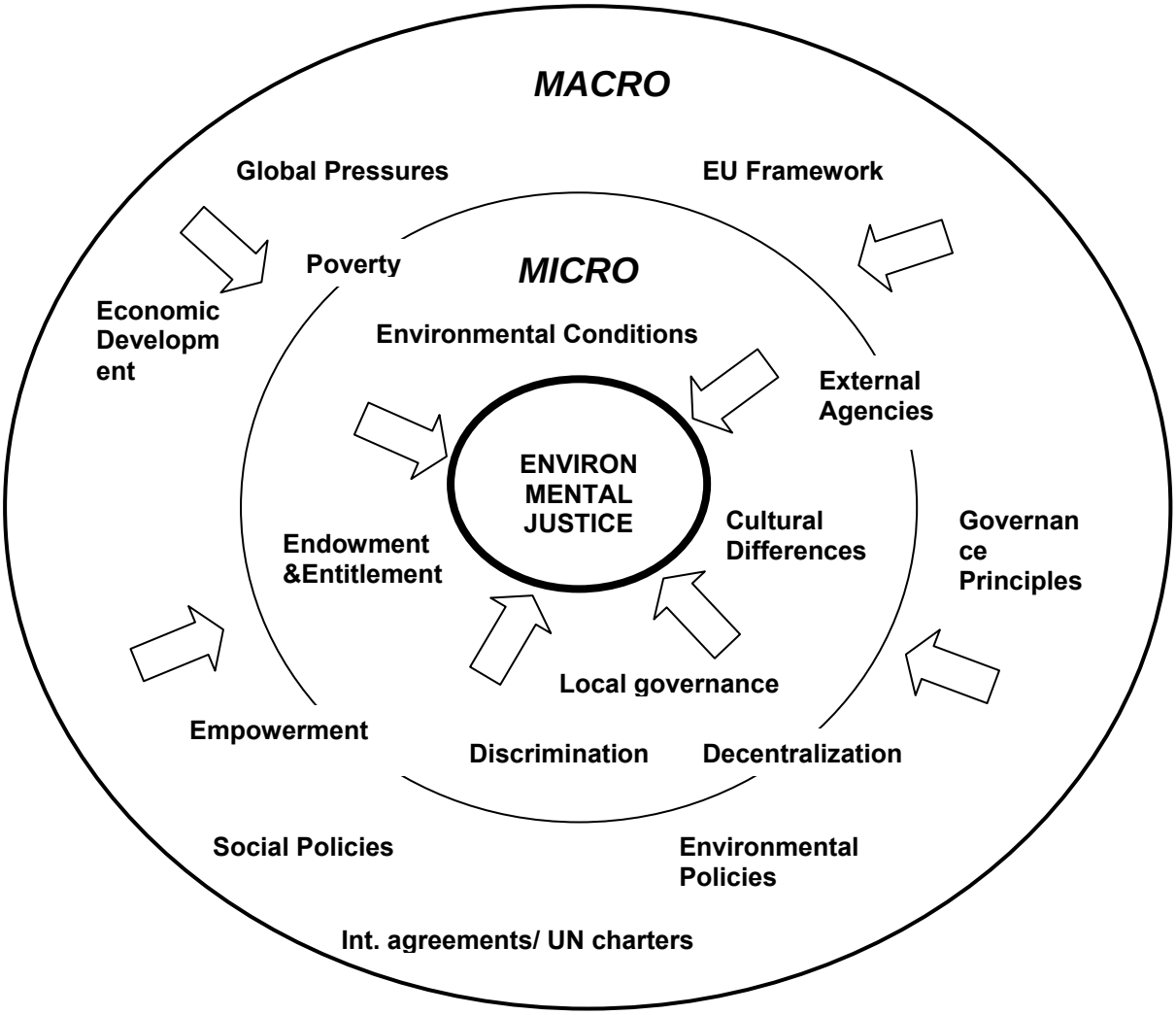
The contribution of this regional research was meant to be threefold. The first contribution was to provide a broader picture of the environmental and social conditions of Roma settlements in the area. The second contribution was to validate the selection of case studies and their relevance for analyses of a broader picture of environmental injustice. And last but not least, disclosure of other potential forms and impacts of environmental injustice not described in the case study research was sought.

The regional research was conducted using RRA methodology, which is built on qualitative research techniques. It is discussed in detail in the section on field methodologies.

3.1.4. Focus on the Macro- and micro-level factors in environmental injustice

Different social and economic factors are important to understanding environmental justice in eastern Slovakia villages. The factors forming and influencing the distribution of environmental benefits and harm in marginalized settlements are summarized in Figure 8.

Figure 4. Macro- and micro-level factors important for environmental justice



Cases of environmental injustice are locally rooted and have clear origins in the distribution of environmental benefits and harm in villages or cities (i.e, at the micro-level). There are macro-level factors, however, which may enable or block unequal treatment of people (e.g., social policies or decentralization). For the purpose of the research I define *macro* as the level not directly under influence of the people living in endangered communities (e.g., the global and

nation-state economic framework, social and environmental policies). *Micro* refers to the community or local level where decisions are formed and done directly by the people and outcomes of social processes involve local stakeholders (e.g., local policies, decisions are made by neighbors and people from the community or area). Human rights and governance, economic, social and environmental policies, as well as the EU's concept of cohesion are the key macro-level factors in this respect. Poverty, social exclusion, entitlements and access to decision making are among the key micro-factors.

The study design (built on case study research and RRA) was aimed to provide sufficient data for assessment and analysis of the relevant macro-level factors, as well as for detailed understanding of the micro-level factors. The following chapters describe field methodology selected for this purpose.

3.2. FIELD METHODOLOGIES

In the previous chapters the focus of this research was defined. In the beginning of the research, the question of *how* to carry it out was faced. The aim became to collect and analyze primary qualitative data from several sites simultaneously. The first step of the research was the pilot study, followed by regional research and in-depth study of selected comparative cases. The regional research relied on a modified form of rapid rural appraisal. This methodology was also deployed in the initial pilot study in order to test its validity and develop practical skills for its use on the regional base. Following the pilot study and regional research, selected case studies in the identified locations were analyzed using qualitative social science methods.

3.2.1. Qualitative research methodologies

In this research I relied primarily on analyses of documentary materials; semi-structured and informal interviews; and participant and non-participant observations. I gathered data as part of the collection of documentary materials. Additionally, I focused on the collection of data

from secondary sources on the number of people from majority/minority populations in the municipality; the number of wells and access to potable water; and the hygiene and health situation.

Using multiple methods, especially methods in which the subjects are not aware of the interviewers or of their hypotheses, increases validity (Webb *et al.* 1966). According to Layder (1993), there are four groups of methods for collecting field data:

- *Documentary materials:* official and governmental statistics, historical documents, diaries, letters, biographies, autobiographies;
- *Questionnaire surveys;*
- *Interviews:* fixed-choice, semi-structured, informal;
- *Observation:* participant, non-participant.

Secondary data were available from central authorities (e.g. the Ministry of Environment, the Ministry of Construction and Regional Development, the Central Bureau of Statistics, and the Office of the Plenipotentiary of the Government for Roma Communities). Other data were collected (and triangulated with the above mentioned sources) from local authorities and NGOs.

Communities were (where possible) approached through local "key informants" and data from the documentary materials were triangulated and verified by interviewing representatives of the main interest groups and stakeholders (in both the majority and minority population). Interest groups were identified through the study of the context and setting. These data were then compared with the data from participant and non-participant observations.

The entire data set consists of 46 open-ended interviews with Roma in the settlements, environmental and social movement organization representatives, community center leaders, social workers, mayors and non-Roma inhabitants of villages with a Romani population, academics, and politicians.

Out of the 46 interviews, 31 were shorter then 15 minutes and were aimed to collect basic data on the environmental and social conditions in the settlements (mostly used during the RRA phase of the research). Another 15 interviews were in-depth, while seven were recorded. In 8

cases I took detailed notes during or immediately after the interview. These interviews lasted between one and two hours. In five cases (three NGO activists and two Roma leaders) I repeated the interviews after one year to validate the data from the first sessions and especially to note any changes (positive or negative) in the Roma communities' situations.

I identified respondents largely through a snowball sampling technique. I went through approximately 10 participant observation sessions of NGO meetings, community center planning sessions, meetings of municipal councils, dialogues between Roma and municipalities, and Roma and social workers in community centers.

During the course of the study I attended seven conferences and workshops focused on addressing the Roma situation in Slovakia. I also studied relevant documents (governmental, from think-tanks) and continuously analyzed newspaper media coverage.

In 2004 – 2005 I participated (as a member) in a working group of experts coordinated by the Slovak NGO *People against Racism.* In eight working sessions we did cross-sector assessment of different aspects of the Roma situation (e.g., the school system, legal framework, human rights, and the environment) and elaborated materials with practical suggestions for the Office of the Plenipotentiary for Roma Communities and for different authorities in the Slovak Republic. During interviews and participant observations, I made use of "indirect data sources" by describing in my field notes, for example, an informant's office meeting facilities, attitudes and reactions of informants when I mentioned Roma for the first time, the behavior of informants in contact with Roma, whether they used polite or aggressive voices, and if they addressed Roma formally or in a familiar way.[34]

3.2.2. Rapid rural appraisal

An approach known as Rapid Rural Appraisal (RRA) was additionally applied to increase the validity of the research overall and further strengthen the detailed insights generated from the in-depth case studies. RRA emerged in the late 1970s as a reaction to the disillusionment of

social scientists with structured questionnaires and surveys that were considered inadequate and often misleading. According to Dunn (1994) the RRA filled the need for a multi-disciplinary approach to research and its intellectual and conceptual origins may be traced to Activist Participatory Research, Agroecosystem Analysis, Farming System Research and Applied Anthropology. There are several key features of the methodology I used:

- *Study, skills building and training* is a crucial step to achieve a consistent set of approaches to data collection. It may include training in techniques such as semi-structured interviewing, active listening and the formulation of objectives and protocols.
- *A project protocol* provides a blueprint to follow. This document should provide a way of approaching the public, stating the purpose of the RRA, how it will be conducted and what the outcomes will be.
- *The methodology* must be adapted to particular resources and field situations.
- *Local "key informants"* should be used to establish the context of each study.
- *Qualitative data techniques* must be learned.
- *Data is fed back* to the community rather than "extracted" for researchers' benefit only.
- *Particular variation* is sought rather than averages. This means that "sampling" is dependent on the data not the interviewees. The number of people interviewed is often determined by the amount of learning and time available.
- Accepting the notion of *"appropriate imprecision"* ensures that resources are not wasted on "accuracy" when it is not clear what the problem is.
- The idea of *"optimal ignorance"* reminds the researcher of the importance of "knowing what's not worth knowing".
- *Triangulation* refers to the process of cross-checking data by collecting it from more than one source.
- RRA is *exploratory and iterative.* Hypotheses and research questions can be rapidly changed as learning occurs (Adopted from Dunn 1994).

One of the features of RRA field research is that data is fed back to the community rather than "extracted" for the researchers' benefit only. In this sense, RRA methodology builds on Activist Participatory Research (APR). APR emphasizes commitment to action and social

[34] In Slovakian, the use of the formal or informal in the second person ("you") is telling. Using the informal version with an unfamiliar person when the other person is using the formal form is usually a display of power or an attempt to humiliate.

change through community facilitation and empowerment (Chambers 1994; Brydon-Miller 1997).

The complimentary approach using RRA and multiple methods, including archival research, interviewing, and participant observation, builds on qualitative research techniques. It means the data was generated from a wide-ranging sample using triangulation to increase the validity of the research. In RRA, I usually spent only a day in each of the selected places. This did not allow me to study deeper context and social processes leading to the distribution of environmental benefits and harm. The aim was to look for particular variation rather than an average access to natural resources and exposure to adverse environmental impacts. The RRA Checklist was used to make a comparative evaluation of Roma and non-Roma settlements (Appendix B). The basic facts about the distribution of benefits and harm between the majority and minority were sought, and the key approach was cross-checking data by collecting it from more than one source (triangulation).

In the course of the study I realized that many of my interactions, discussions with key stakeholders and interviews resulted in awareness building and including the environmental dimension in their work. Many of them admitted that arguments of environmental discrimination can be valid in their work with Roma communities as well as for advocacy for the human rights of the Roma shantytowns. In this way, the research (even in its field stage) may have contributed to ongoing community – building projects and enhancing the potential for change through multiplication of efforts.

After completion of this dissertation, key parts of the case studies, the RRA, and conclusions and recommnendations are to be translated, and this shortened version is to be provided to the community leaders, NGO activities and local municipalities. Although in the RRA particular variations are sought (not averages), the variations will be used for a wider description of environmental injustice and the data gathered will serve for drawing commonalities among the different forms found in the RRA and in the case study research.

RRA practitioners stress that methodology must be adapted to particular resources and field situations. In the case of the pilot study and the regional research I faced a limited budget and time constraints. This limited the scope and type of data collection methods that I could utilize. Nevertheless, the exploratory and iterative process that constitutes RRA allowed me to

adjust and reformulate my scope as I gathered and analyzed data. Rapid rural appraisal builds on the techniques and approaches of qualitative research methodologies discussed in the subsequent chapter.

3.3. DATA ANALYSES

I collected both quantitative and qualitative data in the course of my research. Quantitative data were used for validation of the research, while the primary concern lay in analyses of qualitative data. A primary aim of the data analysis was data reduction and data interpretation. I followed the steps according the five models outlined for analytical procedures by Marshall and Rossman (1989):

- Organizing the data;
- Generating categories, themes and patterns;
- Testing the emergent hypotheses against the data;
- Searching for alternative explanations for the data;
- Writing the report.

The data collected using field methodologies were read and organized into groups. Categories, themes and patterns emerged from the grouping. This led to the formulation of grounded theories[35]. Grounded theories were then analyzed against alternative explanations. According to Marshall and Rossman (1989) alternative explanations always exist. The aim of the researcher is then to provide the most likely and plausible explanation and defend that the explanation is based on solid evidence and a strong analytical frame. I used alternative explanations (where possible) in the text in order to highlight my points and to show why I interpreted the data I had gathered in the other way.

Silverman groups data from qualitative research into the following four categories: interviews, field notes, texts, and transcripts (Silverman 2000). Data analysis is understood to be an

[35] Grounded theory is an approach for looking systematically at data aiming at the generation of theory. Empirically collected data are used to build a general theory to fit the data. Grounded theory is a research method for (used especially in behavioral science). It was developed by the sociologists Barney Glaser and Anselm Strauss.

ongoing process where the analysis does not come after data gathering and data are permanently analyzed in the light of the research question. I started my analyses by coding respondents' answers into the different sets of categories relevant for the analysis of environmental injustice cases. In parallel, I started with content analyses of relevant documents and other forms of communications (e.g., pictures).

Data from the pilot study (gathered through interviews, observation, content analyses of documents, RRA) were analyzed initially, involving validation techniques as described in the following chapter. This was aimed to secure a fit between interpretation and reality. In the regional research and case study investigations I used the same approach of ongoing field analyses and redefining of the methodologies employed.

3.4. VALIDITY AND RELIABILITY

3.4.1. Validation

There are several ways to assess the validity of research. Two common responses are *triangulation* and *respondent validation*. Triangulation may be described as "the combination of two or more different research strategies in the study of same empirical unit" (Denzin 1989). Respondent validation means going back to the subject with our tentative results and refining them based on the subject's reaction. I used these techniques in the course of my study. Especially triangulation proved to be very useful for the research, since there were often significant differences in data gathered from different sources.

However, both approaches have been criticized on the basis of inadequate influence on the research. According to Bloor, triangulation may be said to involve juxtaposing findings gathered by the best available method with findings generated by an inferior method (Bloor 1997). In the case of respondent validation, we may face a problem with the hierarchy of findings. As Silverman puts it: "The subject we study can, if we ask them, give us an account of the context of their action. The problem only arises if we attribute a privileged status to that

account" (Silverman 2000). This danger is very difficult to avoid, given the relatively short time for field research and difficult orientation in what are relative values of different sources of information.

Having in mind the limitations of these two approaches I also relied on the *constant comparative method* as an additional way of the research validation identified by Silverman (2000). According to him, this methods means: "that the qualitative researcher should always attempt to find another case through which to test out a provisional hypothesis" (Silverman 2000). For this purpose I used the 30 settlements visited during the RRA stage as points of validation for some of the findings.

Data gathered in the observations and interviews were triangulated with findings in literature and compared to quantitative data. For instance, subjective feelings about the environmental conditions expressed in semi-structured interviews in Rudňany were assessed against available data on pollution. The respondent validation method was used when findings from the field research were at odds with data gathered from interviews. Respondent validation then served as an additional method to validate findings from triangulation and to avoid the danger of dead ends caused by reliance on inferior data or findings. The constant comparative method was deployed as a validation for the selection of case studies during the regional research using the RRA technique and in the pilot study research.

3.4.2. Reliability

Reliability refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions (Silverman 2000). In order to document my procedures and demonstrate consistent use of categories, I developed a research protocol for field notes from observation and conversations. Semi-structured interviews were typed and stored in my computer. Key parts of the interviews were transcribed and coded.

I kept extensive notes of my conversations and documented my observations. To the extent possible, I typed up my notes in the form of short texts. In these texts I described places,

events, and people, developing recapitulations of key observations and conversations. The memos served as the basis for my final analysis.

3.4.3. Confidentiality and source protection

Confidentiality and protection of the people being interviewed were great concerns. Many Roma activists and NGO leaders are in the very sensitive situation of building mutual understanding among the stakeholders in villages. Roma and non-Roma often feel that their private opinions may be used against them. In order to build confidence I informed interviewees that the information provided would not be used in my report with reference to their original names. I have therefore withheld the names of the individuals interviewed either in respect of their wish to provide information on condition of confidentiality or in order to protect them. Changed initials and/or the basic description of a person are provided together with the time when the interview took place.

3.5. LIMITATIONS OF THE STUDY

My study took place on the limited sample of Roma settlements in eastern Slovakia. The region is the most problematic in the Slovak Republic and faces more harsh conditions than most of the country. This may contribute to extreme conditions for the people at the margin of society – the Roma in rural shantytowns. However, I believe that Roma face similar problems and challenges in other regions. It is just more visible in the eastern part due to the size of the community and general economic conditions.

The locations of the two case studies were selected based on the initial search and to some extent represent extreme cases of environmental injustice or discrimination. Although the results of a rapid rural appraisal of another 30 Roma settlements confirmed that the case study patterns of discrimination could be found also in other settlements, it would require a larger number of Roma settlements to assess the scope of the issue and explore potential forms of

discrimination. This was not physically possible in my research, but could be a topic for broader research that involves more experts from different fields.

Sampling for the regional research was based on a list of 323 segregated Roma shantytowns identified through literature review, census data and official estimations of the Slovak government. New data from a broad sociological survey of the Roma communities done in 2004 provided more exact figures. There are 95 Roma settlements not known prior to 2004 and therefore not included in the research sampling. I do not assume that these Roma communities could provide different data on Roma social and economic conditions and environmental attitudes. However, it is possible that there may be other (unidentified) forms of unequal treatment in the distribution of the environmental benefits and harm.

Data on environmental pollution and degradation in the cases of Rudňany and Krompachy are based on general documents and reports on the pollution in the region. It was not technically possible for me to sample soil and water in the Roma settlements and surrounding areas. I relied on general data and personal observation on the locations of pollution sources. These data were (where possible) triangulated through interviews with local environmental authorities, medical doctors and other professionals.

CHAPTER 4. THE ROMA ETHNIC MINORITY – A SHORT HISTORY AND CONDITIONS IMPORTANT FOR THE ORIGIN OF ENVIRONMENTAL INJUSTICE

Environmental justice is defined as fair and equal treatment for people of all races, cultures, and classes when it comes to the distribution of environmental benefits and harm and procedures leading to this distribution. Whether it is development of environmental laws, regulations, and policies, or bearing a disproportionate share of the negative environmental consequences resulting from the operation of industrial, municipal, and commercial enterprises, environmental justice deals with groups in a society that may be disadvantaged because of their race and/or class. I did not find any research using the environmental justice framework when looking at the Roma ethnic minority, but some of the studies about the Roma mention the adverse environment the people live in.

The United Kingdom Department of Health funded (in 2004) a study on the health status of gypsies and travelers[36]. The study has discovered that these groups have significantly greater health needs than other ethnic minority communities and that there is an inverse relationship between health needs and related services (Aspinall 2004). The majority of existing gypsy and traveler sites in the UK are located in areas that are fully unsuitable for housing and raising families. Some sites can be found next door to waste sewerage plants whilst others may be situated alongside busy dual carriageways.

In the CEE region there are cases of Roma communities in Ostrava, Czech Republic, living in flats above an abandoned mine with methane, in Porto Romano, Albania, where people live on a contaminated industrial site and in Sofia, Bulgaria, where a settlement shares the space

[36] According to Online guide to human rights law in England and Wales is Gypsy a racial definition -- for a people originating in northwest India who left in the first millennium AD. In the UK the term "travellers" refers not only to ethnic Roma, but also to other ethnic and social groups. There are in the UK Irish Travellers, Scots Travellers (Nachins), Welsh Gypsies (Kale) and English Gypsies (Romanichals) among others. There are also Travelling Showpeople (Fairground Travellers), Boat Dwellers (Bargees) and Circus Travellers. Then there are New Travellers or New Age Travellers, often defined as people who have made a conscious decision to adopt an alternative lifestyle, seeking a perceived greater community spirit. Available at: http://www.yourrights.org.uk/ [Consulted 12 July 2006].

with the municipal landfill[37]. The cases point out that Roma face different treatment when it comes to the distribution of environmental benefits and harm.

But who are the Roma and why the discrimination? The following chapter seeks the roots of the Roma and maps social and economic development of the communities in Slovakia. History matters and we can not understand present cases of environmental injustice without understanding the past.

4.1. THE ROMA OF EUROPE AND SLOVAKIA

Many Roma have spread and assimilated with majority populations; a significant number live segregated lives. Patterns of the Roma settlements vary from the virtual urban "ghetto" type in Czech, Hungarian or western Slovak towns to separate villages or shantytowns in eastern Slovakia, Romania or Macedonia. In most of the countries we find both types of settlement represented.

There are various estimates of the size of the Roma population in Europe, which operate with numbers around 10 to 12 million on this continent (ERRC 1999; EC 2004). There are 80,627 Roma in Slovakia according to the official 1991 census, but census data are considered unreliable since many people do not declare their nationality or ethnic affiliation. The London-based non-governmental organization Minority Rights Group estimates the number to be 480,000 - 520,000[38]. The 2004 survey carried out for the Office of the Cabinet's Plenipotentiary for Roma Communities is the most complex approach done since the collapse of state socialism in the country. It indicates that 320,000 Roma live in Slovakia. This is approximately 6% of the total population, which makes the Roma the second largest minority in the Slovak Republic after Hungarians[39].

The different estimates and numbers may result from the fears of minority members to label themselves as "Roma" due to the fear of oppression, because of a feeling of endangered

[37] See UNEP 2000 for more information on Albanian case and EC 2004 for Bulgaria.
[38] http://www.minorityrights.org/ [Consulted 14 March 2004].
[39] The Slovak Statistical Bureau estimates the number of inhabitants in Slovakia to be 5,379,455 (Census 2001). More information at: http://www.statistics.sk/webdata/slov/scitanie/tab/zu.htm [Consulted 1 October 2005].

minority or because of a desire to be part of the majority[40]. An assimilation policy has been on the governmental agenda in Central and Eastern Europe (to various degrees in different countries) for decades. It has been gradually replaced by policies of multiculturalism based on principles of endorsing cultural diversity and the right of different cultural and ethnic groups to retain distinctive cultural identities. According to Gheorghe (1997), Roma are now in a process of ethnicity-building similar to that termed "nation building" by political scientists.

The Roma minority is probably the most distinctive ethnic group in Central and Eastern Europe. Different from their neighbors in culture, language, demographic structure, history, and education level, the Roma are a group facing serious racial discrimination, unemployment, and health problems (Barany 1998; UNDP 2002; Varmeersch 2003; WB 2002; WB 2003). Racial discrimination and poverty are often considered to be the core problem in the degree to which minorities are able to participate in society. Whereas the discourse on racial discrimination started in Western Europe in the 1950s, it was initiated in CEE only after the collapse of the totalitarian regimes[41]. Officially poverty did not exist in the former socialist countries.

Open discourse on minority status and problems emerged only during the economic transformation. It was therefore overshadowed by other emerging problems in society, and Roma found themselves on the periphery of interest. The rapid economic changes also reduced the demand for unskilled labor. In practice, this pushed the Roma minority deeper into a vicious circle of poor housing, unemployment, and deteriorating health. In his research on the socio-economic impact of regime changes in Eastern Europe, Barany (2000) concludes that the transformation from state-socialist regimes to nascent democracies has had profoundly negative effects on the region's Romani communities. Results from the field research I conducted support this claim.

The characteristic feature of the Roma is that, although they are seen from the outside as a homogenous and compact group, in reality the Roma consist of different sub-groups and clans, often with different languages and culture. This, together with other social factors, has

[40] E.g., many Roma declare Slovak or Hungarian nationality in censuses or public opinion polls in the Slovak Republic.
[41] While in Western Europe the 1950s was the time of substantial immigration to supply a booming economy with foreign workers, in the former socialist block it culminated in political oppression and censorship. See for instance Bartosz 2004.

resulted in the inability of the Roma to unite or enter into political discourse and decision making at the nation-state or local level (UNDP 2002; Šebesta 2003). Together with other factors, these conditions contribute to a situation in which Roma interests are promoted within a "top-down" approach due to the influence of EU integration, human rights activists and international organizations[42]. The "bottom-up" pressure for recognition and promotion of their own interests seems marginal in the case of people from the eastern Slovakia shantytowns.

There are several perspectives from which one can interpret the Roma situation. We may look at the situation from the perspective of cultural differences, racial discrimination, or poverty. I consider the Roma problem to be primarily a poverty problem, exacerbated by latent and open racism and discrimination. Poverty relates to poor health conditions, low education, difficulties finding work, inequality of opportunities or endangered environment (UNDP 2004). Discrimination on the job market and exclusion from decision making leads to segregation from society.

4.2. ROMA IN THE SLOVAK REPUBLIC – BETWEEN PAST AND PRESENT

The first historical evidence on the presence of Roma in the territory of the Slovak Republic goes back to the 14th century. Until the beginning of the 15th century they lived in small enclaves and were not very visible in this multiethnic Hungarian part of the Austrian Empire. At the beginning of the 15th century, new, large-scale immigration into the Pannonian Basin dramatically increased the number of Roma (Jurova 2002).

The period of severe oppression and physical attacks on Roma lasted until the Age of Enlightenment and changed with the new policy framework adopted by the rulers of the Austrian Empire (especially Maria Theresia and Joseph II.). The first positive step was a directive of Maria Theresia from 1744 pushing the Roma out of the country instead of killing

[42] Beside the EU-funded activities, the UNDP, USAID and individual member states of the EU (especially the Netherlands and the UK) are among the biggest donors.

them[43]. Later on, a policy of assimilation was adopted for Roma by Maria Theresia[44] and Joseph II[45] (Mann 1992; Jurova 2002).

The death of Joseph II meant the end of assimilation policies. What followed were policies of forced settlement of nomadic Roma. According to Tkacova (2002), based on census data from 1893 there were 36,237 Roma in the territory of Slovakia. The directive of the Vienna ministry of interior affairs in 1888 was the most important legal act in the former Austro-Hungarian Empire and framed policies and actions towards the Roma minority until 1918[46]. The directive was very restrictive and practically meant expulsion of nomadic and settled Roma from society (*Kollárová* 2002). The new democratic regime of the newly formed Czechoslovak Republic did not change official policies towards Roma. In 1927 a new Act on Nomadic Roma restricted the rights of Roma (e.g., introduced special identification cards for Roma, restricted their travel, prohibited ownership of weapons) [47].

A very important provision of the act (with respect to the location of the current Roma shantytowns) is the article on the selection of places for the settlement of nomadic Roma. The Roma were not allowed to settle in places of their choice, but were obliged to settle down in localities chosen by the mayors of the villages. The Fascist Slovak state, established under the auspices of Hitler's Germany during World War II, went further in the direction of restrictions of their freedoms (e.g., Roma and Jews were not allowed to serve in the army starting in January, 1940) and introduced special "work camps" for Roma. The period culminated in the transport of thousands of Slovak Roma to the extermination camps in Nazi Germany[48].

[43] To kill a Roma person was not considered to be a crime in those times.
[44] Ruled from 1740 until 1780.
[45] 1780-1790
[46] In 1918 the Austro-Hungarian Empire collapsed and a new Czechoslovak Republic was established.
[47] Act 117/1927 on Nomadic Roma, approved by the Parliament of the Czechoslovak Republic.
[48] Exact figures are missing, but Slovak Roma were, for instance, transported to the concentration camp at Auschwitz. For more information on the Roma holocaust see, for instance, Bartosz 2004.

4.2.1. Between 1945 – 1989: end of the war, centrally planned economy and Roma comrades

The end of the war did not mean change in the attitudes and policies of the majority. One of the first legal acts in this respect was a directive of the new temporary government in May 24, 1945, where *Expozitura Poverenictva Vnutra* (Department of Interior Affairs of the new government) adopted an amendment to the older directive from April, 1940, on *Governing Certain Conditions of Gypsies*[49]. Paragraph 2 of the directive is of great importance. It states: "In villages where they [Roma] have dwellings in proximity to public, state-owned and other roads, the dwellings will be removed, placed separately from the village in distant places selected by the village" (Jurova 2002).

The start of the centralized socialist state in 1948 brought new attitudes to the Roma – a socialist concept of a new society based on equity, extermination of poverty and a class-free society. The new policy was oriented toward the assimilation of the Roma. In the mid-1950s, the Slovak government initiated extensive research on Roma shantytowns. According to their data, there were 1,305 isolated Roma shantytowns providing space for 95,092 Roma (Jurova 2002).

At the same time, socialist Czechoslovakia started the forced settlement of Roma and the subordination of Roma settlements to local authorities nominated by the Socialist Party. These policies undermined the traditional autonomous system of self-governance while not providing a real alternative. The 1958 Act No. 74, *On the Permanent Settlement of Nomadic and Semi-nomadic People*, forcibly limited the movement of the Roma (perhaps 5-10%) who still traveled on a regular basis[50]. In the same year, the highest body of the Socialist Party of Czechoslovakia passed a resolution, the aim of which was to be the eventual assimilation of the Gypsy population. The so-called "Gypsy question" was reduced to a "problem of a socially-backward segment of the population" (Kotvanova *et al.* 2003).

The relative weight of different factors has changed over the past 50 years. While in the 1950 – 1980 period the labor market was generally favorable towards low-skilled workers, the situtation changed radically in the 1990s. If in the socialist period discrimination was partly

[49] In Slovak: *Uprava niektorych pomerov Ciganov*.

suppressed (especially in the job market), in the 1990s it became a significant factor. The result of forced assimilation policies and integration in the former socialist regime is that those Roma with education or particular labor skills (e.g., performers, blacksmiths, and businessmen) have been assimilated, while the majority of the population remains segregated. Those living in segregation are usually poorer than their non-Roma neighbors. Roma poverty is now partly related to education, labor market factors, and large family size, but it also stems from exclusion, discrimination and other factors (WB 2003a).

Policies of forced settlement and industrialization in the 1950s (resulting in mass resettlement and increased numbers of commuters) decreased the influence of traditional leaders in these communities, and the structure of self-governance collapsed. According to a public opinion poll conducted by UNDP, only 22% of Roma rely on the support of informal Roma leaders (UNDP 2002).

Despite the verbal proclamation of the Communist Party and other authorities, the situation of Roma improved only at a modest pace under the new socialist regime in the 1960s and 1970s. This questioned the ideology of communism, since although capitalism had disappeared, most of the Roma were still in a miserable situation. The situation was in the 1960s defined as unbearable by the party authorities of eastern Slovakia and the central government decided to address the problem of the social situation in Roma shantytowns.

In 1965, the Czechoslovak government decided to solve the "Gypsy question" through a new political approach. After a period of integration attempts and appeals to socialist values, Governmental Ordinance No. 502 stressed two tasks: Full employment of those Roma who were not disabled and were in the economically active age, and termination of Gypsy shantytowns and dispersal of these people throughout Czechoslovakia. Subsequently, the Committee of the Slovak National Council adopted a strategy of diffusion and re-settlement of Roma. The strategy had three aspects: (i) Eviction of the Roma shantytowns and providing new houses; (ii) Education of Roma youth and support for Roma students; (iii) Employment of Roma males. This set-up of priorities confirmed strong paternalistic tendencies of the socialist state's approaches to addressing the Roma problem (Jurova 2002). Moreover, measures such as destroying Roma huts (by the government) as unsuitable for the 20th

[50] Estimation from literature and from interviews with Slovak experts.

century, without providing adequate housing (the regime was not able to build needed houses in a short time), was not the kind of approach Roma would have welcomed.

The primary targets of these dispersals were Roma colonies in eastern Slovakia. According to Ulč (1969): "at that time, of the 153,000 Gypsies in Slovakia, 103,000, i.e. 67.3% lived in such settlements under conditions which are not fit for human living." This ambitious plan was abolished at the beginning of 1970s. It proved to be costly and ineffective and extremely unpopular among non-Roma. There was a quota for how many Roma shantrytowns in Slovakia were to be erased and people resettled (mostly into the Czech part of the federation)[51]. Although these radical measures and policies were adopted, the number of Roma shantytowns decreased very slowly.

The late 1970s and 1980s was a time of overall political stagnation in Czechoslovakia following the Warsaw Pact military intervention in 1969. Ambitious plans of the post-war period were abandoned and replaced by less demanding construction of houses in selected Roma shantytowns (see the case study of Svinia) and continuing pressure to keep Roma employed.

4.2.2. The years 1989 – 2003: economic transition and political neglect

The 1989 "Velvet Revolution" in Czechoslovakia and the following rapid transformation of the economy overshadowed the Roma issue for several years. The new regime of liberal democracy provided formal opportunities for minorities to develop their own organizations, fight legally for their interests and take their place in decision-making processes.

For instance, the Hungarian minority has used this new opportunity to create political parties, entering parliament and introducing political measures for the protection of minority rights (e.g., use of their own language as the official language, Hungarian schools, theaters, etc.). The Ukrainian and Ruthenian minorities also reached certain goals (mostly as a by-product of the Hungarian efforts). For the Roma, however, the beginning of the transition meant rapid

[51] According to Ulč (1969) quotas were not met from the very beginning. In 1966 the target of moving 512 families to the Czech Republic was 20% fulfilled. In 1967 only 58 hamlets of a planned 155 were abolished.

deterioration of social and economic conditions, which were already worse in comparison to the non-Roma majority.

The situation of the Roma in Slovakia illustrates that marginalized groups may become victims of economic and social transformation. If we zoom the picture we see that the recipes valid on the nation-state level may turn out to be disastrous on the local one. Barany (2000), in his research of regime changes and its impacts on the Roma, concludes that the recent change in the 1990s have signified a disaster for the majority of Roma only slightly mitigated by new opportunities for political mobilization.

Internally fragmented, poorly educated, and lacking leaders and resources, the minority fell out of interest for political parties and did not participate in the new power games. The old social measures and protection (including subsidized job opportunities) were lost and new ones were not created. As Mann (2002) specifies:

> Restructuring of the economy [in the beginning of the 1990s] meant especially release of low-qualified workforce from employment, which impacted most Roma. Other aspects contributing to the Roma unemployment have been decrease in amount of construction works, limited highway construction [due to recession], but also split of Czechoslovakia, because Czech lands traditionally provided job opportunities for Roma.

There was a certain interest by governments after 1989 to address the Roma issue. This goes back to 1978, when the dissident movement Charta 77 published a document on the Roma issue[52]. Nevertheless, democracy opened a Pandora's Box of suppressed problem and the first ethnic conflicts sparked immediately after 1989, including attacks by the skinhead racist movement and increasing hostility of non-Roma inhabitants towards their Roma neighbors in villages. The federal government attempted to address the new social and economic situation of the Roma through the *Proposal for basis of state policy for social development of Roma in the Czechoslovak Federal Republic*, published in 1991[53].

After the split of Czechoslovakia, the Slovak government took over the agenda. The first framework document was adopted already in 1991: *The basis of the governmental policy in*

[52] The former Charta 77 spokesman, Vaclav Havel, personally visited (as one of his first official presidential visits) Roma shantytowns in eastern Slovakia in 1990.
[53] Original title: *Návrh zásad štátnej politiky spoločenského vzostupu Rómov v ČSFR*.

respect to the Roma and its applications for a department of education, youth, sport, culture, employment, social affairs and finance[54]. The bottom line of strategies and documents in the beginning of the 1990s was that aid to Roma should not be allocated on the ethnic principle and it focused on three dimensions of the problem: (i) political; (ii) institutional; and (iii) socio-economic. While in the first two some progress was made, the socio-economic dimension was underestimated (Kotvanova *et al.* 2003). On the one hand, the new regime opened space for Roma political parties – there was governmental support for theaters and cultural activities and an attempt to build formal institutions (the effort culminated in the 2002 by the establishment of the Office of the Plenipotentiary of the Slovak Government for Roma Communities). On the other hand, economic recession practically pushed the Roma out of the labor market. This development has reinforced stereotypes about the Roma as "parasites", and supported hostility among the non-Roma.

The two most adverse trends in the Roma "coping strategies" have been (i) relying on large-size families and child allowances as the source of income; and (ii) resettlement from towns back into the shantytowns. A relatively extensive system of governmental funds and social assistance for large-size families created a system where child allowances made up a substantial part of the Roma families' incomes[55]. The origin of the system supporting a baby boom is, however, much older. It started after the suppression of the "Prague Spring" and suppression of the reformist movement in Czechoslovakia at the end of 1960s. The new orthodox socialist authorities supported families as an attempt to melt resistance after the Soviet occupation.

As a result, Roma shantytowns entered a baby boom in the 1970s that lasted through the 1990s. Moreover, in 1990s, those Roma who lived in various dormitories and houses for workers lost their ability to pay bills or were simply thrown out as soon as their employment contract terminated or these dwellings were sold to private owners. They had no choice than to return to the shantytowns.

The EU integration process meant a radical turn in addressing the Roma situation in Slovakia. The EU soon recognized the scope and potential implications of the Roma situation for the

[54] Original title: *Zásady vládnej politiky k Rómom a ich rozpracovanie v rezortoch školstva,mládeže a športu,kultúry, práce a sociálnych vecí a financií*.

[55] This issue of Roma natality is much broader and includes a lack of life strategies, education of Roma females, missing perspectives of the people in shantytowns as well as traditional and cultural values.

political and economic stability of the country, and the Roma issue climbed the ladder among priority actions for fulfilling the Copenhagen' Agenda 2000 and acquis implementation[56].

This process was reinforced by the mobilization of domestic and international NGOs and a growing number of social, environmental and policy projects for the Roma communities. However, the end of the 1990s and beginning of the 2000s was marked by a worsening of the social situation, a growing social gap and increase of poverty, especially among unemployed people with large families. These trends are evident from microcensus research in 2003, where there is a clear link between unemployment, size of family and poverty[57]. In all, 73% of households with their head unemployed, and 62% of households where the head was on parental leave, are at risk of poverty.

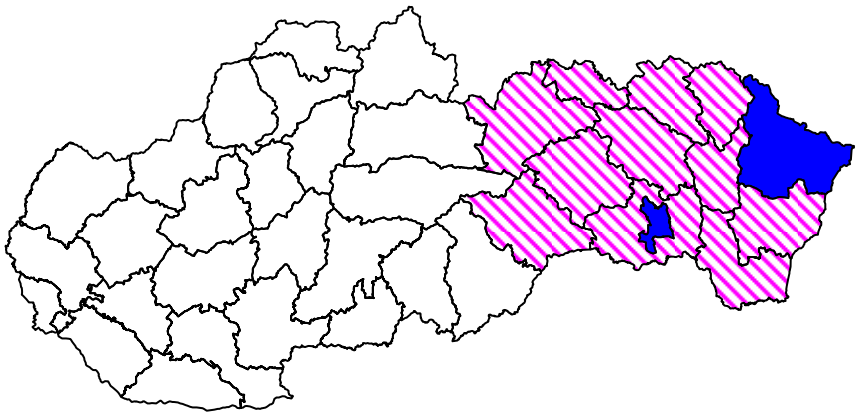
Microcensus 2003 also confirms the high risk of poverty among large-sized families. There is a direct linkage between the number of dependent children in family and the risk of poverty. If 25% of one-child-families are below the poverty threshold, in the case of families with three children it is 50%, and in the case of families with five dependent children, 80% of them are below the poverty threshold (Kusá and Kvapilová 2004).

[56] Agenda 2000 lists the political criteria of the EU for new applicant countries. Acquis is the set of EU policies, directives and regulations to be implemented in the legal framework of countries applying for the EU membership.

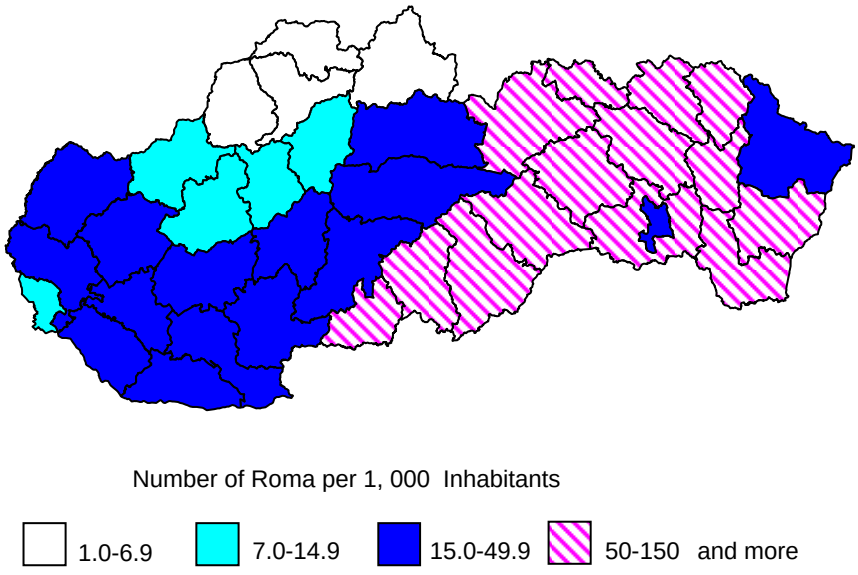
[57] Calculation of income-based indicators of social cohesion for Slovakia was presented for the first time in the first draft of the *Slovak National Action Plan on Social Inclusion 2004 – 2006* in May 2003. Data presented refer to the sourcebook *Microcensus 2003*, which comprises basic classifications of income categories of households by other characteristics.

Figure 5. The population density of the Roma population in eastern Slovakia and in the Slovak Republic before 1991

a) Eastern Slovakia



b) The Slovak Republic



Source: Adapted from Ginter *et al.* 2003, based on 1991 census data.

The most striking situation is in rural settlements, especially in the eastern parts of the country with high concentrations of Roma (see Figure 4 for an illustration). The economic transformation in Slovakia has enhanced segregation. Since Roma are among the first to lose their jobs, the already high number of state-dependent Roma is increasing further[58]. Complex laws governing residence permits, combined with discrimination, mean that Roma are often unable to move, since municipal authorities refuse to provide them with residence permits for their new choice of settlement. Local councils have issued ordinances banning Roma from settlements, Roma are frequently evicted, and many observers have noted a trend to remove Roma from town centers and relocate them to inferior housing on the periphery (ERRC 1999). Due to these restrictions Roma have limited possibilities to move to other places and they usually stay in the shantytowns of their birth. Under such circumstances Roma are practically locked into the current settlements, which may be problematic from a social and/or environmental point of view.

4.2.3. Years 2003 – 2006: Roma increasingly in the spotlight, but socio-economic pressure was also increasing

The so-called Roma problem has received more attention from the side of the government in the 2000s. The *Complex Development Programme for Roma Settlements*, adopted on 10 April 2002, came into force, and pilot projects were initiated. In these projects, the state attempted to integrate different interventions together with the aim of reinforcing each other and increasing the impact of measures such as social work, community centers, pre-school education, construction of infrastructure and houses, and employment generation.

The Office of the Plenipotentiary for Roma Communities played an increasingly important role, and the Ministry of Regional Development allocated funds for construction of public houses for the most deprived communities. The Ministry of Social Affairs introduced an "activation policy" for those long-term unemployed who work part-time for their municipality

[58] Roma mostly do unskilled jobs and are subject to racial discrimination from employers when downsizing (among others, the European Roma Rights Centrum and Open Society Institute have documented systematically cases of this discrimination).

or a non-profit entity. The primary targets of these measures are the long-term unemployed. Those included in the scheme work up to 80 hours a month for SKK 1,700 (EUR 42.5).

The implementation of the activation programmes has been accompanied by many problems. According to Oravec and Bošelová (2006), the most serious one is that the activation programmes seem to be failing in their major goal: to regenerate people's employability. The activation policy evolved from a short-term active labor market policy tool into a new form of long-term social dependency.

It is difficult to activate people for the labor market in a situation of high unemployment and demand for people with higher education. Roma, who usually do not possess these skills, are discriminated against on the job market. These factors contribute to the increasing poverty among the ethnic minority. According to statistics from 2004 the at-risk-of-poverty rate in Slovakia is the highest and also the deepest among the EU 25 member states (at 40% of the median income threshold – 13% of the total population).[59] The unemployment rate has been also very high. According to the Labor Force Survey of unemployment in the first quarter of 2004, the average unemployment rate reached 19.3%.[60] Long-term unemployment in the same period was the highest in the EU 25 – over 11%[61].

One of the most significant problems became regional disparities within the country and rural poverty. Table 2 illustrates strong differences between the Bratislava region and the rest of the country, where especially the Prešov county profile is the poorest, followed closely by Košice, where some of the indicators are better than average only because of the performance of Košice (the second largest city in Slovakia)

[59] EUROSTAT, *Statistics in Focus, Population and social Indicators, 12/2004*.
[60] *Source:* Statistical Office of the SR, July 2004
[61] The data are based on draft version of *Slovak National Action Plan on Social Inclusion 2004 – 2006* (September 2004).

Table 2. Regional disparities in social standing in 2002 in the Slovak Republic (by regions)

Indicator	*Slovakia*	*Bratislava*	*Trnava*	*Trencin*	*Nitra*	*Zilina*	*B.Bystrica*	*Prešov*	*Košice*
GDP per capita (PPP, 2000)	10,724	22,708	10,822	9,888	9,392	9,104	9,008	6,632	10,053
Unemployment rate (%)	18.5	8.6	16.1	11.3	23.8	17.3	25.2	20.1	24.1
Average monthly wage (%, SR=100)	100.0	130.5	92.4	90.1	84.6	89.2	86.2	79.9	96.6
Average monthly income of a household member (SKK)	6,469	8,157	6,404	6,670	6,225	6,290	6,147	5,870	6,338
Share of population dependent on social assistance (%)	11.5	2.5	8.6	6.6	12.2	8.7	14.6	16.1	18.9

Source: Statistical Office of the SR, Ministry of Labor, Social Affairs and Family of the SR

As part of the reform of the social assistance system, the government declared the need to tackle high unemployment, particularly long-term unemployment. However, the implemented measures have a direct impact on the income situation of households and influence negatively chances of marginalized individuals and groups escaping the poverty trap. New social assistance is aimed to return people "back to work." While misuse of the system may occur in areas with low unemployment (especially in western Slovakia), it is practically impossible to find any job opportunity in the marginalized regions. Those who can not find jobs sink into the category of "long-term unemployed" and instead of unemployment benefits they receive social assistance.

The system of assistance went through significant changes in 2004. For an illustration of how the social situation of a model family with two unemployed parents and five depended children changed, see Table 3.

Table 3. Income of a model family before and after the 2004 social reform in Slovakia*

Before the reform (as of July 7, 2002)	**After the reform (as of December 1, 2005)**	**After the reform – if both parents work in the system of "public work" for activation bonuses****
Social assistance 1st adult – SKK 1,965 2nd adult – SKK 1,375 1st child – SKK 1,580 2nd children – SKK 1,580 3rd children – SKK 1,580 4th children – SKK 1,580 5th children – SKK 1,580 Total – SKK 11,240 EUR 53.52 (EUR 1.34) per person and day Children allowances – SKK 4,000 Health care – free of charge	*Social assistance* Couple with more than four children – SKK 4,950 Allowance for health care (7 x 50) – SKK 350 Total – SKK 5,300 SKK 29.40 (EUR 0.74) per person and day Children allowances – SKK 2,700 Health care – visit to the doctor is SKK 20, a day in hospital is SKK 50	*Social assistance* Couple with more than four children – SKK 4,950 Activation bonus (2 parents – 1,700 each) – SKK 3,400 Allowance for health care (7 x 50) – SKK 350 Total – SKK 8,700 SKK 48.30 (EUR 1.2) per person and day Children allowances – SKK 2,700 Health care – visit to the doctor is SKK 20, a day in hospital is SKK 50

*Model family with long-term unemployed parents and five children (ages 4, 7, 11, 12 and 14)

** Based on assumption that both parents participate in the activation policy

Source: Office of the Slovak Government, 2005.

The deteriorating social situation makes the Roma in eastern Slovakia more vulnerable to environmental injustice since it orients their energy towards daily survival and looking for exit strategies. Rudolf Kawczynsky, chairman of the European Roma Forum, described the Slovak social policy introduced in 2004 as a policy of apartheid against Roma. According to him, many Roma classify this policy as a "cold" deportation and especially young Roma are leaving the country because of the adverse social system and impossibility of finding a place in the job market[62].

If we take the capital city Bratislava, there are five unemployed people per job vacancy, while in the western Slovakia district of Trenčín it is 6.3. In eastern Slovakia, however, it is as high as 186 per vacancy in Veľký Krtíš, 254 in the Revúca district, and 204 in Kežmarok[63]. Moreover, the adverse situation of Roma on the job market is amplified by racism on the side

[62] Slovak Republic Press Agency TASR *Kritika slovenskej sociálnej politiky voči Rómom* [A critique of the Slovak social policy for the Roma]. Press Release on 17 May 2005.

of employers. As Mann (2002) points out: "If there are somewhere new job openings, employers usually refuse to hire Roma and prefer non-Roma". Poverty, lower education, low mobility and ethnic discrimination minimize chances for Roma to find practically any job[64].

The research of Kusá and Kvapilová (2004) suggest that those at the highest risk of poverty and social exclusion – especially after the introduction of new legislation – are the Roma living in the colony-like (shantytown) neighborhoods. The new social reforms were introduced in the beginning of 2004 with practically no field work among those who were known to be the most affected by these steps. Labor offices did not keep up to sufficiently inform those impacted about the consequences of the new legislation and the number of field workers (mostly paid by NGOs in their development projects) could not substitute for them.

The social impact has been significant, especially for large-sized families with long-term unemployed parents living in the disadvantaged areas of eastern Slovakia. According to Kusá and Kvapilová (2004), many such families lost almost half of their benefits, especially because the law introduced a maximum limit for this that takes into account only four children in the family. However, most Roma families in the shantytowns are larger then this and eight to 12 children are not unusual (Vaňo and Meszáros 2004). Introduction of these reforms resulted in riots and rebellions in early 2004. Looting of grocery shops and restaurants occurred in several Roma settlements.

The situation of the Roma communities in shantytowns is gradually worsening since the introduction of the new social reforms (see Table 3 for illustration – after the 2004 reforms the income of a model family with unemployed parents and five children fell to on 0.73 EUR per person and day). This trend will be reinforced by the ongoing process of liberalization of the prices of utilities and health care reform[65]. All these factors influence development alternatives for those communities facing unequal treatment in the distribution of environmental benefits and harm. Worsening of the social situation changes the priorities of both Roma and non-Roma.

[63] Data as of January 2004. The Slovak average was 33 unemployed per vacancy (Web site of the Ministry of Labor, Social Affairs and Family – www.employement.gov.sk) [Consulted 3 march 2004].
[64] For individual cases of discrimination on the job market see, for instance, cases monitored by European Roma Right Centre. Available at: www.errc.org [Consulted 4 November 2006].

4.2.4. Environmental agenda overshadowed by social problems

Green movements' representatives (key actors in dismantling of the former state socialist regime) succeeded in gaining a share of power in the first governments in the beginning of 1990s. Environmental degradation and demand for a better quality of the environment were perceived as among the most pressing issues in those times (Tickle and Welsh 1998; Pickvance 1998).

Table 4. Most pressing problems to be solved in Slovakia (% of positive answers)

Problem Areas	1997	1998	2001
Standard of living	65	65	64
Unemployment	60	65	82
Crime and personal safety	62	66	46
Heath care	48	50	69
Ethics, quality of interpersonal relations	43	36	24
Housing	29	29	26
Environment	18	14	9
Ethnic and minority problems	6	7	5
EU and NATO integrations	11	18	12

Source: Adapted from Vagáč and Haulikova 2003.

Over the years, with the progress of the economic transformation, the environment and environmental protection have descended the ladder and social issues have taken over in people's perceptions of the most acute problems[66]. Table 4 illustrates this development. Economic transformation, unemployment as a new factor, and growing social insecurity have changed people's perception of the importance of different problems. The environment is gradually being considered as less important vis-à-vis other problems.

In a situation where environmental quality is not a priority, many questions of the equal distribution of environmental harm are neglected and ignored as a marginal problem. Even people who are directly affected by environmental injustice (like Roma in the shantytowns) may not consider this to be the highest priority.

[65] In September, 2004, the Slovak Parliament approved significant reforms in health care, involving direct payment for some diagnoses and the contributions of patients for services.

Slovakia in the mid-2000s is a country with a low perception of environmental threats among the general public, but with many environmental problems[67]. It is a country with a growing economy, but social problems are growing as well (Falťan, and Pašiak 2004; Kusá and Kvapilová 2004). It is also a country where one ethnic minority (i.e., the Roma) faces strong prejudices and even racism (Džambarovič and Jurášková 2002; ECRI 2004; EC 2004). This is the background for analyzing the present and potential cases of environmental injustice.

4.3. THE RIGHT TO ADEQUATE HOUSING

The right to adequate housing as a component of the right to an adequate standard of living is enshrined in many international instruments[68]. Most notable among these are the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights. During the 1990s, the right to adequate housing gained increasing recognition.

The second United Nations Conference on Human Settlements (Habitat II), held in Istanbul in 1996, endorsed important changes in the approach to human settlement, acknowledging the need for a balanced and environmentally sustainable approach. At that time, 171 governments (including the Slovak Republic) adopted the Habitat Agenda, a global call for action setting out approaches and strategy for the sustainable development of the world's cities, towns and villages in the 21st century[69].

According to the Habitat agenda, adequate shelter is a very broad concept. It is much more than a roof over one's head[70]. It calls for promoting access for all people to safe drinking

[66] In the beginning of 1990s environmental protection topped public opinion polls as the main priority for the country.
[67] See for instance: *State of the environment report 2003.* Bratislava: Ministry of the Environment of the Slovak Republic.
[68] For international and EU legal framework see Antypas, A., Buonsante, V., Cahn, C., Filčák, R., and Steger, T. *Environmental justice in Europe: an argument for the further development of EU law and policy to address the disparate impact of environmental harm in excluded communities*. Forthcoming in 2007.
[69] *The Habitat Agenda, Istanbul Declaration on Human Settlements,* (3-14 June 1996, Istanbul, Turkey) United Nations Human Settlements Programme (UN-HABITAT) http://www.unchs.org/unchs/english/hagenda/index.htm [Consulted 3 October 2005].
[70] It also means adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and durability; adequate basic infrastructure – such as lighting, heating, ventilation, water supply, sanitation and waste-management facilities; suitable environmental quality and health-related factors;

water, sanitation and other basic services, facilities and amenities, especially for people living in poverty, women and those belonging to vulnerable and disadvantaged groups[71]. It is this perspective which I adopted in assessing housing quality in the Roma shantytowns. Other elements of the right to adequate housing, as elaborated by the UN Committee on Economic, Social and Cultural Rights, include: (i) Availability of services, materials, facilities and infrastructure, (ii) Affordability, (iii) Habitability, (iv) Accessibility, (v) Location, and (v) Cultural adequacy.

In Europe, Article 31 of the Revised European Social Charter additionally provides that: "With a view to ensuring the effective exercise of the right to housing, the Parties undertake to take measures designed: 1. to promote access to housing of an adequate standard; 2. to prevent and reduce homelessness with a view to its gradual elimination; 3. to make the price of housing accessible to those without adequate resources" (Antypas *et al.* 2007).

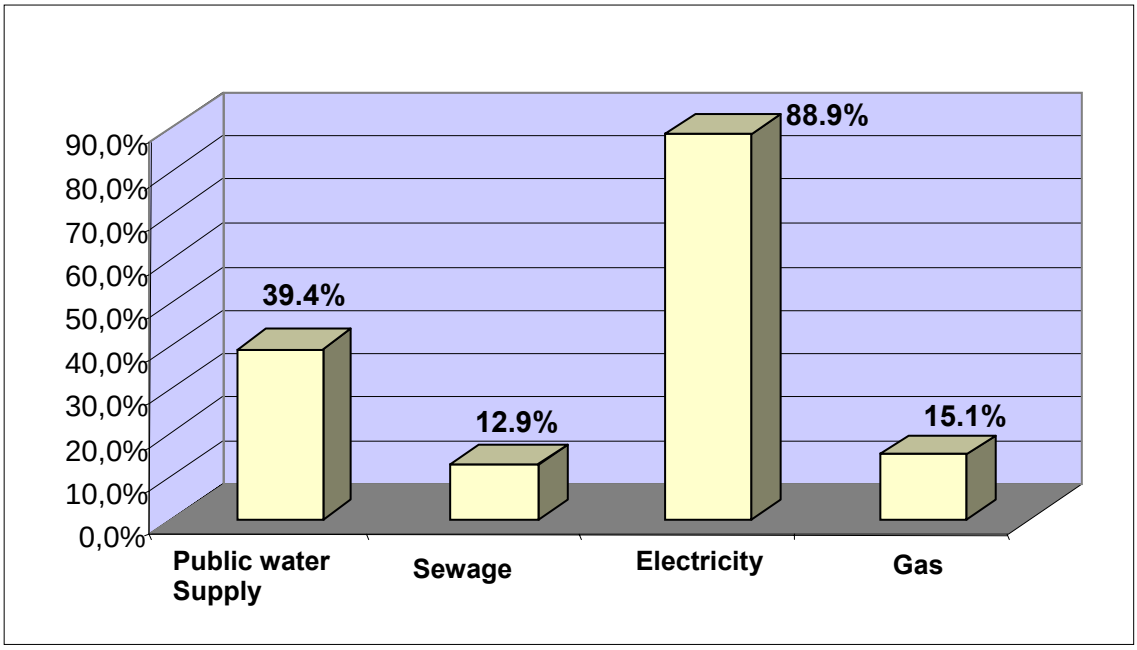
Access to utilities and public services is nonexistent or limited in many marginalized settlements. The World Bank Report pointed out that "The most serious problems [in Slovakia] include lack of access to electricity, water, sewage, and garbage collection" (WB 2003). Poor sanitation due to the lack of basic infrastructure is a major reason for the poor health status of Roma communities. In the Slovak Republic, for example, these factors contribute to the high mortality rates for Roma infants: 34.8 per 1,000 children born, while the mortality rate among non-Roma infants is 14.6 per 1,000 children born (WB 2000).

Infrastructure development may be the key to improving the Roma's health situation. A significant part of the water and sewage treatment infrastructure is financed from the state budget, either from domestic sources or through co-financing mechanisms of the European Union. The Slovak Republic (as part of the accession process to the Union) adopted EU environmental legislation. Several water-related directives relate to water treatment, including Council Directive 91/271/EEC concerning urban wastewater treatment which states that every settlement with more than 2,000 inhabitants has to have a wastewater facility.

and adequate and accessible location with regard to work and basic facilities, all of which should be available at an affordable cost. (The Habitat Agenda, Paragraph 60).

[71] The Habitat Agenda Chapter III – Commitments: Adequate shelter for all - Paragraph 40c.

Figure 6. Share of dwellings in segregated Roma settlements in Slovakia connected with basic infrastructure



Source: Adopted from Jurášková *et al.* 2005.

While many Slovak villages do not fulfill this directive, in the case of Roma settlements the situation is even worse due to the fact that they often do not even have a drinking water supply system and use water from often polluted wells (WB 2000; UNDP 2002). Figure 5 illustrates access of Roma to basic infrastructure.

The allocation and distribution of financial resources in a society is a power struggle among a number of political parties, interest groups, lobbyists and businesses, and last but not least, a reflection of the strength of different stakeholders. The lack of political influence and effective know-how for participation in decisions concerning the allocation of resources for building infrastructure effectively limited this minority from accessing governmental and EU funds.

Very weak formal and informal networks protect and promote Roma interests. Roma elites are generally characterized by political fragmentation and the absence of common political strategies (Ringold 2000, WB 2000; UNDP 2002). The Roma minority is represented by a fragmented spectrum of minor political parties, unable to unite and enter the parliament.

At the local level there is a similar situation. Roma are rarely elected members of the municipal authorities. These factors contribute to the unequal access to a safe living environment.

4.3.1. History of shantytowns in eastern Slovakia and ownership rights

It is often difficult to trace back the origins of settlements and evaluate environmental conditions in these places prior to the Roma arrival. It is not clear when exactly the settlements were established. Some of them may go back to the 18th century; some were established after World War II. The Roma were usually allowed to settle down when they were needed as a workforce in agriculture or as craftsmen. After 1948, the centrally planned economy supported mass-scale production in industry or provided low-profile jobs on cooperative farms. This allowed Roma to find enough employment opportunities.

The policies of collectivization and nationalization of private property adopted after the Communist Party seized power in 1948 made the issue of property rights irrelevant and local governments under control of the party allocated rights for using most of the land. There are indications that Roma may have owned some land before 1948 (e.g., personal interviews in Svinia and Jarovnice), but the lack of evidence deprived them from getting the land back after the 1989 restitutions took place[72].

One of the myths about the Roma is that they were nomadic people forced to settle down by the socialist regime only in the 1950s. Census data challenge this claim. In Slovakia many Roma had already become sendentarized by the 14th and 15th centuries. An 1893 census revealed that of the 36,000 Roma in Slovakia less than 2 percent were nomadic (Guy 1975; Barany 1994). Although we can be skeptical about the ability of 18th century administrations to calculate properly the number of nomadic people, we may assume that the history of some of the Roma settlements goes back a hundred (or more) years.

[72] Most of the properties nationalized between 1948 and 1989 were returned to the original owners, provided that they were able to declare the property rights.

The new legislative framework introduced after the collapse of old regime in 1989 further worsened their situation. Under the new legislation, people who had houses on the state-owned land were allowed to transfer the land into their private property, providing they fulfilled the following two conditions: (i) The house was built legally or received the legal status within a period stated by the law; and (ii) The land was registered in the cadastral register and was not subject to restitution.

The process of legal status transformation for a house required around 30 permissions from different authorities, investment in construction and/or reconstruction, and last but not least, a good orientation in legal and administrative procedures, which are often costly. Many Roma were not able to do this and in the meantime the state or municipality often sold the land from under their feet to private owners. Thus, in the beginning of the 1990s, many Roma found themselves living illegally on private property[73].

There were two main turning points in the development of the Roma settlements. The first was the industrialization of Slovakia after 1948 and the concentrated demand for unskilled labor in industrial hubs and on cooperative farms. Industrialization forced the migration and concentration of Roma to places where jobs were available. The second point was the expansion of the shantytowns, which was partly because traditionally Roma have a tendency to have bigger families (UNDP 2002; Vaňo and Meszáros 2004), and partly due to an inflow of people into the shantytowns after the beginning of the economic transformation of the 1990s. The inflow was caused by the fact that people in towns lost their jobs and had problems paying rent and utilities in workers' dormitories or in rented flats.

This development has resulted in two phenomena:

- As the Roma settlements grew, they were more visible, encounters and tensions were more frequent and non-Roma pushed them out of the centers to the edge or beyond the edge of villages (e.g., the case of the Roma in Rudňany in 1970s and Svinia in the 1980s);
- As the Roma shantytowns grew, there was not enough space for the people and they started to built houses and huts on land unsuitable for construction (e.g., the huts of Roma in Chminianske Jakubovany were built very close to the river on wetlands).

[73] Interview with social worker in Svinia, July 2004.

The already mentioned 1945 directive and practice of decision making in the former state socialism support the hypothesis that the location of Roma shantytowns is not accidental, but follows a certain pattern[74]. It may be described as "segregation and invisibility." Environmental conditions in the places designated for Roma played, either consciously or unconsciously, a decisive role in these decisions. As the result of segregation policies of local municipalities, the deterioration of the social situation and population growth, many Roma settlements in eastern Slovakia resemble slums on the outskirts of cities in developing countries.

4.3.2. Roma shantytowns – a description

There are many types of settlements where the poor, migrants or ethnic minorities seek places to settle down. They are usually characterized as an amalgam of overcrowding, poor or informal housing, insecurity of tenure, unclear property rights, problematic residence permits and inadequate access to safe water and sanitation. The other common feature is the location on the outskirts of big cities, or on the peripheries of villages. As Davis (2004) points out:

> The urban poor […] are everywhere forced to settle on hazardous and otherwise unbuildable terrains – over steep hillslopes, riverbanks and floodplains. Likewise they squat in the deadly shadows of refineries, chemical factories, toxic dumps, or in the margins of railroads and highways.

There is a clear link between poverty, the quality of housing and the environment. Davis (2004), in his account of environmental threats, deals with the urban poor in developed and developing countries. Although he describes urban poverty and its environment, similar patterns may also apply for settlements in rural areas, as it is in in the case of specific pattern of Roma (mostly) rural settlements in eastern Slovakia, where only a few settlements may resemble the urban type of ghetto.

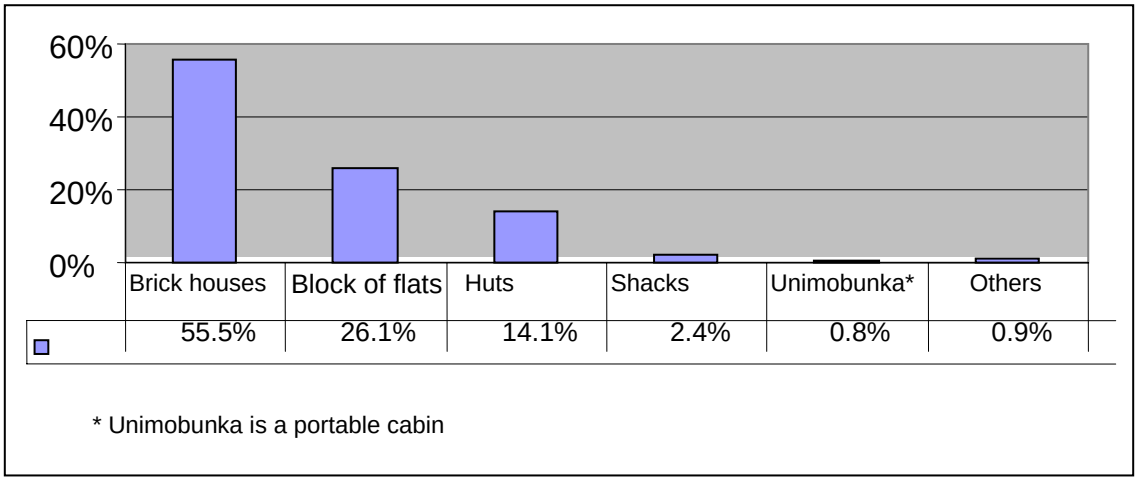
In this work I use the term *shantytown* or *informal settlement* for Roma settlements to distinguish them from *slums* or *ghetto*, which are generally understood to be located on the

[74] See the section 4.2.1. Between 1945 – 1989: End of the war, centrally planned economy and Roma comrades.

outskirts of big cities and are (to a large extent) an outcome of urbanization. Settlements which may be labeled as *urban ghettoes* (or *slums*) in Slovakia are, for instance, in Zvolen-Zolna (4,500 inhabitants[75]) or Košice-Lunik IX with 4,241 inhabitants occupying 1 square kilometer). Shantytowns (or informal settlements) are usually defined as units of irregular low-cost and self-constructed housing built on terrain seized and occupied illegally — usually on lands belonging to third parties, most often located on the periphery of cities[76].

The reason why I consider the term *shantytown* more appropriate for Roma settlements is twofold. These settlements are not an outcome of urbanization but rather originated in the dynamics of the Roma's search for suitable places to living. Secondly, it is the quality of dwellings. While ghettoes are usually more affiliated with blocks of apartments and concentrations of people into flats, shantytowns are more characterized by brick houses, or huts assembled in a patch-work fashion from pieces of plywood, waste construction materials, hay, clay, corrugated metal, and any other material, usually locally assembled, that will provide cover. Blocks of flats are also presented as the outcome of former regime resettlement projects for the people from informal houses. The most frequent types of houses and their share in Roma settlements are illustrated on Figure 6.

Figure 7. Types of dwellings in Roma settlements



Source: Adopted from Jurášková *et al.* 2005. Data based on socio-graphic mapping in 2004.

[75] There three public wells serve the whole community.

Based on the official estimate of the Roma Office of the Slovak Government, there are approximately 620 Roma shantytowns in the Slovak Republic. The data are based on an extensive quantitative study done by this office in 2000 (there is sometimes more than one Roma settlement in one village). Jurášková *et al.* (2005) came to the figure of 799 segregated settlements. I consider these data to be the most reliable estimation of the present size of the Roma minority. The data are based on field mapping, where researchers visited every village with a Roma minority in Slovakia. The subject of the sociological research were settlements where inhabitants are subjectively referred to be a Roma community and where people were identified as Roma by researchers, NGOs and other experts based on anthropological characteristics, cultural habits, or lifestyle.

The shantytowns in Slovakia are prevailingly located in rural areas on the outskirts of villages, usually clearly segregated from the main village. The smallest may consist of a few people (e.g., six people in Kamenica-Sabinov), the largest sometimes house between one and two thousand people (e.g., Podhorany, Zamutov or Kecerovce). One of the biggest shantytowns is in Jarovnice, providing space for almost 3,000 inhabitants.

4.3.3. Roma shantytowns as a growing phenomenon

Lack of sanitation, basic infrastructure and segregation from the village limit the capabilities of the people who live in shantytowns. An increase or decrease in the number of people living in these shantytowns provides an important indicator of how successful Roma integration is in society and is the strength of the potential of the people and/or communities to influence their living environment.

The numbers used to estimate Roma in shantytowns are to some extent questionable. There is limited information on the methodology different authors used in different years for their data collection and how these data were processed. Information on what was/was not included into the calculations is not clear (with the exception of the data compiled in 2005 by Jurášková *et al.*). Moreover, different authors probably used different definitions of shantytowns and segregated settlements.

[76] See for instance *Encyclopedia Britannica*, *Webster's Dictionary* or Goldstein 2003.

So what was the growth dynamic or decline in the number of people inhabiting the shantytowns? In the 1950s there were 1,305 isolated Roma shantytowns providing space for 95,092 Roma (Jurova 2002). In 1965, according to Ulč (1969): "of the 153,000 Gypsies in Slovakia, 103,000, i.e., 67.3% lived in such settlements under conditions which are not fit for human living." These numbers are based on estimations of the former centralized administration.

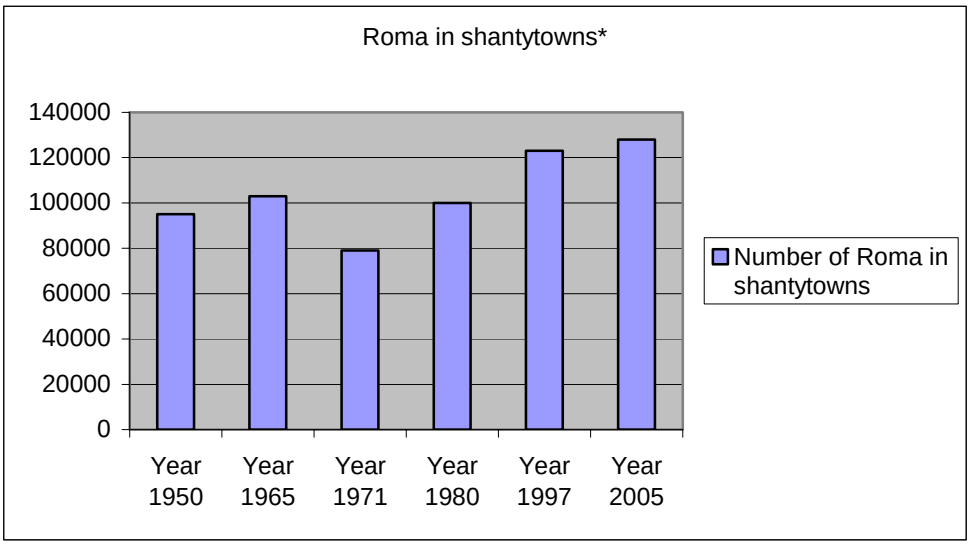
The UNDP's Human Development Report on Slovakia (2000) came to the following conclusions. The number of Roma colonies almost doubled from 278 recorded in 1988 to 516 colonies in 1997. Vagáč and Haulikova (2003) point out that the number of housing units in Roma colonies had increased from 12,361 units in Roma colonies in 1988 to 14,334 recorded in 1997 (i.e., 1,973 new places). The number of families in Roma colonies increased from 2,543 in 1988 to 22,785 by 1997, an increase of 20,242. The number of Roma families living in shacks also grew, from 2,543 families in 1989 to 4,606 in 1997. The total population living in Roma colonies grew by 108,046, from 14,988 people in 1988 to 123,034 in 1997. While most of the data correspond with later research, Vagáč and Haulikova's figure of 14,988 people (in 1988) living in "colonies" seems to be an unrealistic underestimation.

The data from 1997 to 2000 (UNDP 2000; Vagáč and Haulikova 2003) are based on outcomes of questionnaires developed by the Ministry of Labor, Social Affairs and the Family. The questionnaires were distributed through county offices to district authorities where responsible administrators filled them in. The problem is that definitions of what is (and what is not) a segregated Roma settlement were not clear and the people who collected the data were not well instructed. It is therefore important to take the data with reservations, although they may illustrate the dynamics of the shantytowns' growth.

Jurášková *et al.* (2005), in their broad socio-graphic mapping of Roma communities, identified as many as 799 segregated Roma settlements in Slovakia, while the total number of people living in segregated Roma settlements was estimated to be 128,000. If we summarize these figures (see Figure 7 for an illustration), the outcome is that the number of people in segregated settlements went through a small increase in the 1950s (the post-war period), declined in the late 1980s and rapidly increased in 1990s (connected with the economic and social transformation). Data used for the figure are based on experts' evaluations using census data. The exception is the figure for the year 1980. Given the fact that in 1965 it was around

103,000 people and in the period of 1966 – 1971 the former socialist regime moved around 24,000 people from the segregated settlements into new houses, I estimate the number for 1980 to be around 100,000 people[77].

Figure 8. Estimated number of people living in segregated Roma settlements between 1950 and 2004



** Please note that the figure for the year 1971 is based on the proclaimed results of the resettlement programme between 1965 and 1971.*

Source: Ulč 1969; UNDP 2000; Jurova 2002; Vagáč and Haulikova 2003; Falťan and Pašiak 2004; and Jurášková *et al.* 2005.

The reliability of all the data used for Figure 7 is problematic. Nevertheless, two trends are validated by the literature and field observations. There was a decline in the shantytown population during the massive resettlement in 1965-1971, and there has been a growing number of people living in shantytowns in the last 15 years. The decline in the number of people living in shantytowns in the beginning of the 1970s was due to the ambitious re-settlement programme of the former regime and was closed due to the affiliated costs. After this, shantytowns started to grow again due to a higher birth rate (Faltan and Pasiak 2004; Vaňo and Meszáros 2004), but the radical increase came with the economic transformation.

[77] The massive resettlement program stopped in the beginning of the 1970s due to a lack of resources, but there were still limited attempts like the one in Svinia described later in the work. This estimate is based on the number

4.3.4. Indicators of the quality of life in shantytowns

Life in the shantytowns is problematic. A UNDP report from 2000 came to the conclusion that 20 Roma colonies did not have a source of potable water, 15 more than in 1988. A majority of the colonies also face problems of insufficient infrastructure – low-quality drinking water and roads, an absence of public lighting, no sewerage, gas supply or social establishments, unsatisfactory conditions of housing, no shops, post offices, schools, etc. The 15 Roma colonies in 1988 without public lighting had increased to 251 by 1997. The number of Roma colonies with no hard-surface access road increased from seven in 1988 to 34 by 1997.

Jurášková *et al.* (2005) estimated that out of the 799 segregated Roma settlements in Slovakia, 46 Roma settlements have no infrastructure at all. This means that there is no paved road to the settlement, no public water supply, no connection to the sewage system or gas. Out of this number, 12 settlements do not even have connections to electricity. In Table 5, I compare the situation before in the former centrally planned economy (year 1988) and a decade later, after the shift to a market economy. These numbers are interesting especially from the perspective of the impacts of the social and economic transformation on the Roma communities. The decade after the start of economic liberalization brought severe deterioration of living conditions for many families and individuals. If we do not assume that the people lost interest in employment and decent housing and chose this life voluntarily, then it means that macro- and micro-level social and economic conditions must have radically changed for them.

Table 5. Selected indicators of shantytown development between 1988 and 1997

Indicator *Year*	*No. of houses*	*No. of families*	*Families in shacks*	*Places with a source of water*	*No public lighting*	*No hard road access*	*No. of places with no sourse of water*	*Total population*
1988	12,361	2,543	2,543	5	15	7	278	100,000*
1997	14,334	22,785	4,606	20	251	47	516	123,034

* Estimation

of people in shantytowns after the massive program in 1966 – 1971, taking into account that according to Faltan and Pasiak (2004) the Roma population grew by 25.5% in the period 1970 - 1980.

Source: Based on data from Vagáč and Haulikova (2003) and UNDP (2000), Jurášková *et al.* 2005

Two main factors have influenced the number of people in shantytowns. It is firstly an outcome of the Roma demographic pattern. According to Vaňo and Meszáros (2004), the average fertility of 120,000 Roma in segregated shantytowns is 4.5 times higher than the average in the Slovak Republic. Secondly, the deteriorating social situation of the people during the economic transformation led subsequently to resettlement from flats or workers' dormitories back to the shantytowns[78].

Shantytowns have been growing in number and size throughout the 1990s and the beginning of the 2000s, and the situation of their inhabitants has been worsening. Return and resettlement of new people in shantytowns, a growing rate of unemployment from a very low level in the beginning of the 1990s to near 100% in the 2000s, widespread usury and discrimination are the key factors in social dynamics of shantytowns[79].

4.4. MACRO- AND MICRO-LEVEL FACTORS IN ENVIRONMNETAL INJUSTICE

As this short description of Roma history illustrates, the relationship between Roma and non-Roma has gone through a long period of cooperation, but also conflicts. Treatment of Roma, their exclusion and confinement to shantytowns, can not be explained as an *ad hoc* geographically located pattern of behavior, but rather as systematic segregation. Understanding the history of settlements, the dynamics of entitlement distribution in a broader picture of policies and processes provides an important framework for analyzing environmental justice.

[78] E.g., because of unemployment, the inability to pay rent and utilities or termination of contract by the new property owner of privatized properties.

[79] To be unemployed in former regime meant violation of the law and could have been even penalized by jail sentences. According to Šebesta (2005) "until 1967 the [former] regime reached 75.9% employment of the Roma male population."

Several macro-level factors described in this chapter may enable or block unequal treatment of people (e.g., social policies or decentralization). Yet equally important are micro-level factors referring to the community or local level where decisions are formed and reached directly by the people, and outcomes of social processes involve local stakeholders (e.g., local policies and decisions are made by neighbors and people from the community or area).

All of the macro- and micro-factors overlap in places and may play positive as well as negative roles in development at the local level. Sometimes intentions are good, but implementation on the local level proves controversial. Decentralization may be a positive trend, but if the transfer of power to local municipalities supports oppression of a minority by the majority it suggests that there is a problem with the concept and/or its implementation. Economic and social reforms may look like a positive and progressive tool for increasing economic growth, but if the number of people who benefit from these reforms is small, and there is growing group of others who suffer from its impacts, then it is questionable whether these reforms have been elaborated well, justified if the negative impacts are temporary, or if they mean a long-term process of deterioration of the social situation.

Environmental injustice is about people who are unequally exposed to adverse environmental impacts or are limited in their access to environmental benefits. The macro-level of nation-state policies provides a framework for these in both positive and negative terms. Sometimes the framework is bad, sometimes it is relatively good, but the state does not have adequate power and resources for its implementation at the local level. In each of the cases macro-level policies are very important for shaping social processes on the local level and preventing or addressing cases of environmental injustice.

However, to understand the real impact of the macro-framework we have to look at the micro-level and see what the reality in the communities is and what effects policies and programmes have on the local level. The following case study chapters look at the concrete situation of Roma communities and what is the distribution of environmental benefits and harm as the outcome of local social processes (the micro-level) framed by the general economic, social and environmental policies and trends in the country (the macro-level).

CHAPTER 5. CASE STUDY: RUDŇANY

Rudňany is a small village in eastern Slovakia. The dominant point is an old abandoned tower with a mining lift in the very center of the valley surrounded by the nice two-story houses of the local inhabitants. All around the forests are partly damaged by industrial production. If you enter the village by the main road from the nearest town of Spišská Nová Ves, the first thing you see is the Roma community living on the abandoned and derelict factory site at Zabíjanec. If it is summer, Roma children are jumping into the stream, which is collecting water from abandoned mines and gathering all possible garbage and waste on its way through the village.

You leave Zabíjanec behind and enter the village of the two-story houses and blocks of apartments. If you continue, you will come to the hill above the village, where you find a monumental building of the former mining company administration at Pätoracké. The first impression is that the building resembles ruins of towns impacted by heavy bombing and fires during the Second World War. If you get closer, you find small huts and houses made of scrap material on the slopes around it. You are still in Rudňany, but you have crossed two different worlds through an ethnic line which is not marked on the ground, but of which all the inhabitants are well aware.

Here I attempt to illustrate differentiated access to environmental benefits and harm through the case of Rudňany — a story of Roma people and their environment. This case study is divided into three parts. In the first, I describe the case study goals and objectives, research questions and interests that framed my field research in Rudňany. The second part is descriptive. It maps the situation in the village, the people and their environment. The third part is analytical. It attempts to deconstruct social processes that have contributed to the present situation in the distribution of environmental benefits and harm in this place.

5.1. THE RESEARCH SETTING AND DESCRIPTION

I can not recollect when I first heard about the Roma in Rudňany. I guess it was in the mid-1990s, when the extreme situation of the local Roma attracted journalists transversing the country from time to time. Environmental conditions were sporadically mentioned in these articles as an aspect of Roma life. When I started to explore the nexus of poverty, discrimination and the environment, the village came to my mind as the natural place to start the research. My goal was simple. I was interested to see if I could frame the social, economic and environmental problems in Rudňany as a case of environmental injustice. And if so, what are the social processes that have contributed to the present situation? In doing so, the following objectives were identified for the research:

1. To examine the historical, social, political and environmental context that has influenced the present location of the two Roma settlements in the village.
2. To study the distribution of power and the relations that shape the lives of the majority and minority in the village (What is the political organization in these communities? Does the ethnic minority have any access to decision making at the local/regional/national level? Do some groups and individuals control other groups and individuals? If so, how so? To what extent does conflict and tension characterize the setting?).
3. Can we state that the present (or past) distribution of environmental benefits and harm is (was) discriminatory to some of the inhabitants?

This chapter describes the outcome of my field research, which was done in the period of 2003 – 2005. It summarizes my understanding of social processes related to the present situation in the distribution of environmental benefits and harm.

The Middle Spiš region is reportedly one of the most beautiful parts of the Slovak Republic. High mountains, deep forests and ancient towns with a long history attract tourism and provide assets for the inhabitants. But at the same time, people in the region struggle with high unemployment, the collapse of traditional industries and face pressures from social and economic reforms. The region has a multiethnic character, where you find (besides Slovaks) a strong Hungarian minority in the south and a relatively large minority of Roma spread all

around the region. Because of its multiethnic character and social stratification, this place is of extreme importance for understanding the relationships between ethnic origin, social status and the environment.

Figure 9. Location of the village Rudňany

Rudňany encompasses all of the above-mentioned characteristics. It is situated in a valley surrounded by forests. Administratively it belongs to the district of Spišska Nova Ves (see Figure 9 for illustration). The village faces problems of a collapsed economy due to closing of the mines and ore-processing factory at the beginning of the 1990s, and due to the past industrial activities is endangered by industrial pollution as one of the environmental hot spots in Slovakia. It fulfills the following criteria important for environmental justice research: (i) *Ethnic composition and clear ethnic/class division* – a strong Roma minority; (ii) *Social situation* – negative economic impacts of the economic transformation on the inhabitants; and (iii) *Environment* – large-scale environmental degradation due to past industrial activities.

5.1.1. The village, people and environment

Rudňany is situated in the eastern part of the Slovak Republic, approximately 14 km from the town of Spišská Nová Ves. The first historical document about the village is dated from the

year 1332. Traces of settlement in this area go back to the year 1700 BC. Geographically, the area belongs to Hnilecke Vrchy (The Hnilec Hills) – part of the Slovenské Rudohorie Mountains. The whole territory of Sloveské Rudohorie has a long tradition of mining and ore processing[80]. Gold, silver, copper and other metals were (and to a small extend still are) mined and processed here. Large-scale development started in the 16th century and continued until the end of the 20th century.

The biggest increase in mining came after the year 1945. Mercury started to be processed here. Mining factories were employing thousands of people and demand for unskilled labor was high. A radical turn came with the start of the economic transformation in the 1990s. In the beginning of the 1990s there were around 2,500 employees working in the mines and in metal processing. By the year 2003 the total number of employees went down to 150, and it is expected that the factories will be closed soon (Malatinsky 2003). In the beginning of 2006 factories in bankrupcy were trying to negotiate complicated reconciliation and debt service with the government.

Mining and metal processing were the main sources of employment in the village, and the sudden collapse of the industry at the beginning of the 1990s reshaped the social situation and perspectives of all the inhabitants. The total number of inhabitants in 2003 was 3,293 people. Most of them are Slovaks, while the Roma minority consists of roughly 1,200 people[81]. The Roma live in absolute segregation from the majority and with the exception of several individuals they are settled in three places.

Most Roma live in the Pätorácké shantytown approximately 0.8 km outside of the village. According to government figures[82] there are 452 inhabitants, whereas my estimate, based on field workers' figures and data from local activists, is 570. The second shantytown is approximately 1 km outside of the village at Zabíjanec. In the summer of 2004 it provided

[80] In Slovakian, *Rudohorie* means m*ountains with metal ores*.

[81] There are two data sources on the Roma minority size: Official censuses and estimates of the local municipality. For the purpose of the study I operate with the municipality estimates, since I consider their numbers to be more realistic. In the official census in 2002, only 400 people (or 12.4%) of the inhabitants in Rudňany declared Roma nationality.

[82] Uznesenie vlády slovenskej republiky č. 1117 z 26. novembra 2003: *K prehľadu stavu zásobovania obyvateľstva pitnou vodou v marginalizovaných rómskych osídleniach s návrhom dočasných vyrovnávacích opatrení* [Position of the Slovak Government number 1117 from November 2003: On the supply of the inhabitants with potable water in the marginalized Roma settlements, including temporary affirmative measures].

space for 469 inhabitants. Several families also live in two segregated blocks of apartments on the western outskirts of the village.

5.1.2. Social and economic situation

The beginning of the economic transformation caught the inhabitants of the village in a very weak starting position. Most of them had worked in the mining and metal-processing factories with stable and relatively good salaries[83]. Most of these jobs were low-skilled positions. The collapse of the company, accompanied by downsizing in almost every enterprise in the region, has had a strong negative impact on the village.

Newly created jobs often require at least secondary education, social skills, extensive travel or resettlement. These conditions mean that many people in the village fall into unemployment and poverty. They are not able to travel for work, because wages in the region do not allow this, and because of the ecological damage in the village and general situation in the region. Property values are extremely low and virtually eliminate any attempt at resettlement[84].

New employers emerged after 1990, but they are not able to provide sufficient job opportunities. Besides five small shops and two local pubs, there are two small textile workshops, one transport company and one company producing plastic windows and other construction materials in the village. While this picture is generally not very optimistic, there is a group of people who were impacted even harder: the Roma minority.

For the Roma who moved into Rudňany mostly because of job opportunities, the era of state socialism represents a period of relatively good times. Although they were marginalized, the general Labor Code demanded employment of all citizens. Compulsory education accompanied by scholarships represented a way out of the shantytown. Roma worked in the mining factories, the railway company, waste management and other places with a demand for unskilled labor. After the start-up of the economic transformation (in the beginning of the 1990s) the unemployment rate among Roma from the shantytowns reached almost 100%.

[83] Salaries and social benefits of miners were among the highest in the economy of the former socialist regime.

5.1.3. Environmental conditions

The Rudňany area belongs to one of the 10 most problematic environmental "hot spots" in the Slovak Republic (MoE SR 2003). The reason is the long tradition of mining and ore-processing industries that was intensified from 1950s until the 1980s by the former state socialism and a centrally planned economy focused on the promotion of heavy industries and exploitation of natural recources. Investment in environmental measures took place only in the late 1980s as a result of a decline in the central control and the opening of the system. Nevertheless, these changes came only several years before some of the mining industries collapsed (e.g., Rudňany). As a former foreman in the mine recollected:

> In the late 1980s we installed filters on the chimney and the pollution went down to almost zero. This was good because this mercury…it was disaster here. Everything was dying. And then, just after this the mine closed…They closed the mine like you close the door. No preventive measures, no conservation…When the water which is now collecting in these [abandoned] mines will fill the mines to the top, it will start to leak into the streams and then you will see ecological disaster.

As an outcome of this industrial development, the whole territory is contaminated by toxic emissions and surrounded by abandoned factory sites (often polluted from industrial activities and operations), waste dumps and abandoned mines. The toxic mine tailings contain mercury, which can cause mental illness, birth defects, kidney failure and other diseases. The abandoned mines are gradually collecting water from underground and surface sources and in a few years they will start to release highly toxic effluents into the environment.

According to the Slovak Hydrometheorolical Institute (SHMU 1997) the main sources of air pollution in Rudňany were emissions from the Železnorudné Bane Company (mining and metal-processing), Kovohuty Krompachy (metal processing) and secondary emissions from mine waste. While air emissions from production have dramatically decreased due to the collapse and restrictions in production, mining waste is a permanent danger for the inhabitants.

[84] The average price of a house in Rudňany is about SKK 200,000, while the price of a 1-room apartment in the Bratislava region starts at around SKK 1,000,000.

From the 1950s until end of the 1980s the ore-processing factory released annually approximately 60 tons of mercury into the air. This was the main source of pollution in the area and effectively made this village one of the most problematic places from an environmental point of view. In 1987-1988 electrostatic filters were installed and effectively 97 to 98% of the mercury was removed from the releases. Nevertheless, this investment was done only two years before downsizing started and the company gradually ceased to exist. The scope of the pollution is visible on Figure 10, where practically all the vegetation on the slope above the factory in Rudňany has disappeared or is heavily damaged[85].

Figure 10. Abandoned metal processing factory in Rudňany

Abandoned mines and deposits of mining and ore-processing waste are unresolved problems. According to Šottnik and Rojkovič (1999), "the deposits of mining dumps consist of stored sulphidic concentrate with dominant tetrahedrite, chalcopyrite, pyrite, quartz and siderite. Chalcantite and melanterite were formed on the surface of the concentrate due to oxidation processes. Acid water (pH from 2.5 to 3.5) discharges on the surface from the sulphide dump

[85] This picture was taken in the summer of 2004. In the late 1980s there was no vegetation at all on the slopes above the factory.

and intoxicate the surrounding soil and vegetation". These waste dumps contaminate surrounding soils and agricultural products.

There is around 40 square kilometers of land contaminated by lead in the area surrounding the Rudňany mining factory premises. The concentration of lead is 1 mg kg^{-1} (Koči *et al.* 1994), while the environmental norm in Slovakia is 0.1 mg kg^{-1}, which means that the concentration is 10 times more than the norms allow. The amount of waste from mining and ore processing was estimated in 1992 like this[86]:

- Non-ore waste is around 1,550,000 tons (can be used in building and construction material – very low levels of contamination). The waste is directly on the premises of the factory.
- Waste from ore-processing. Estimated to be around 52,000 tons, this waste contains copper (23.61%), antimony (11.94%), mercury (0.054%), iron (24%), sulphur (20%), and silicon dioxide (10%).

The dominant source of pollution in Rudňany has been mercury produced by ore-processing. According to Dombaiova (2005) the leaves from the contaminated sites in Rudňany apparently show much higher concentrations of mercury (up to 3.231 and 802 ng Hg/g, respectively) and were an order of magnitude higher than those from uncontaminated sites, reflecting the strong Hg contamination in Rudňany plants.

Emissions decreased with the introduction of new technology in the late 1980s and stopped completely after the collapse of production in the beginning of the 1990s. However, measurements of the Slovak Academy of Sciences and external experts (Koči et al 1994; Čiško *et al.* 1994; Ochodnicky 1996) suggest, that pollution is higher than limit values in the areas directly surrounding the factory premises and in the places of past mining and metal processing activities (in the Rudňany–Poráč direction) — exactly where two Roma settlements (Pätoracké and Zabíjanec) are situated.

[86] The estimations are from the mining company, verified by the Slovak Academy of Sciences. Since the mining and ore processing almost abruptly finished in the begining of the 1990s we may take this as a very realistic estimation of the present amount of waste in Rudňany.

5.2. THE ROMA IN RUDŇANY

The Roma settlement in Rudňany is a relatively new phenomena. Roma settlements or shantytowns were virtually unknown in the village prior to the 1950s. We may assume that there were Roma working in the mines even before the larger scale immigration to the village started, but they did not form separate enclaves. Industrial development in the 1950s, economic policies of the centrally planned economy and relatively attractive salaries and demand for unskilled labor attracted Roma from the surrounding villages (and broader surroundings) to settle in this place. According to local people, most of the Roma came from Zavadka and Poráč (nearby villages with significant Roma populations).

It is important to understand the central role played in the village by the Mining and Metal-Processing Company (Železnorudné Bane Rudňany). Hardly any decision concerning social, economic and environmental issues was taken without the influence of the company. This central role in the village goes back to the beginning of its existence and was increased after the nationalization of private properties (after the 1948 communist victory in the former Czechoslovakia). Both the company management and municipal council were under direct control of the communist party. Since 1990 this role has been gradually decreasing.

Although state-owned companies in the former socialist system provided accommodation for their workers (in the system of constant demand for labor, accommodation was one of the basic incentives to attract workers), this did not happen in the case of the Roma workers. Only a limited number of Roma workers' families broke the barrier between the minority and majority and escaped the shantytown by moving into public housing for employees. The others formed the first shantytown in Zimna Dolina (Cold Valley), close to the center of the village.

In the beginning of the 1970s the Roma moved out of Zimna Dolina to the present locations at Zabíjanec and Pätorácké. The official explanations for this step differ. Interviewed people from the majority claim it was because of a lack of space. The place soon became too small for the growing population and Roma were looking for alternative ways to solve the accommodation problem. Although I did not find any evidence (besides several hints from the interviews of both Roma and non-Roma) there is also an alternate explanation, that the Roma

in Rudňany were forced to move from their old houses in the middle of the village and settle in new places on the outskirts.

In the beginning of the 1970s Roma moved into abandoned factory sites (the Zabíjanec shantytown) and the abandoned former administrative and social buildings of the mining company (the Pätoracké shantytown). This re-settlement is hardly imaginable (in the former totalitarian regime) without approval (or at least indifference) of the authorities and the mine administration, although all of them must have been aware of the social and, most of all, the environmental conditions in the places Roma moved to.

5.3. ENVIRONMENT AS A THREAT – A TALE OF CONTAMINATED LAND

5.3.1. The shantytown in Pätoracké

Pätoracké used to be a privileged part of the village. In the 1950s and 1960s the mining company built houses and a whole infrastructure for their employees there. Two blocks of flats served the company's mid- and high-level managers. The settlement could be described in the beginning of the 1970s as a fully functioning part of the village with water and electricity infrastructure, school, offices and shops. At the beginning of the 1970s problems arose.

Mining activities from the past started to endanger the settlement due to subsidence. There are several kilometers of mine corridors right under the settlement. The deepest underground structures are estimated to go as much as 900 meters below the surface. The first accident with houses falling happened in the beginning of the 1970s. The authorities declared the place an endangered zone. As an immediate response, the company decided to move all the residents to newly built houses and flats in the towns of Spišská Nová Ves and Smižany.

Estimates (based on interviews in the village) suggest that around 2,700 people moved out. The whole infrastructure and all of the houses were destroyed and decommissioned with the exception of the two three-storey administration buildings. This happened despite the fact that

the mining and processing company received money from the state budget for removal of all buildings and infrastructure as part of the program of demolishing the endangered zone. It is not clear why they left these two buildings behind, but the abandoned blocks soon attracted Roma from the village and from other surrounding villages and towns. Non-Roma were evacuated; Roma were silently allowed to be there.

Pätorackés is located only a few hundred meters from mining and factory sites, which made this place even more attractive for Roma because the place was close to their work. Figure 11 shows the Pätorackés settlement. The entrance to the mine was on the left side on the top of the hill of mining waste. One of the two administrative buildings is still there, the other one collapsed in 1989 and Roma used the scrap material to construct houses in the surrounding area.

Figure 11. Pätorackés settlement in the Rudňany village

Thirty years after the Roma moved in, Pätorackés is home to about 500 people. They have two water taps serving the whole community. Both Roma interviewed and municipal council members confirm that the water is of good quality. There is no sewage system or sewage treatment in this settlement, and the hygiene situation (especially in the summer) is harsh. There are no toilets with running water and no place to bathe, children collect water in plastic jars and bottles, and in the absence of waste collection the place is surrounded by rotting garbage.

The shantytown is located approximately 0.8 km from the edge of the village and the only connection is an unpaved road. Snow and climatic conditions often prevent children from attending school in the winter. Access for medical rescue teams in the case of emergency is problematic. The local authorities and factory management apparently did not take any steps to address the situation until 1989, when open press, bankrupcy of the company and the new social and political system generated criticism of the living conditions in the Pätorackés settlement. The shantytown, with houses made of waste material, tin and stones, is built on the land of the company. The Roma are neither owners nor tenants. Small houses and huts are built illegally on land restricted from any public or commercial use. Legally, the former

administrative building does not exist, since the building was supposed to be destroyed and decommissioned at the beginning of the 1970s. Roma are no more than squatters in the building and huts which are not supposed to be there.

In 2001 part of the zone sank, and there is still a hole in ground in the middle of the settlement. Fortunately, nobody died in this accident. After the sinking of the houses an emergency situation was announced and the government immediately responded with new plans on how to address the situation. In the first plan, there was an intention to build 86 flats for all the families who were living there at that time. The municipality invested SKK 2.5 million (or EUR 62,500) in 2001 to build (with the support from the government) 31 flats for 270 Roma in Pätoracké[87]. However, at this moment negotiations between the municipality and the ministry for Construction and Regional Development have slowed down, and the remaining 55 flats (out of the planned 86) remain only on paper.

The newly built flats are in the reconstructed administrative building of the mining company, just several hundred meters from the shantytown. Despite the fact that this location is free from landslides and subsidence, it is still surrounded by the mining waste dumps and is separated from the village. In 2005 there were still around 300 Roma living in the shantytown waiting for the remaining 55 flats to be constructed. Because of the danger of landslides and subsidence, this area will probably be closed in the future even for trespassing.

The first people from houses most endangered by landslides were resettled and the remaining families are waiting for their turn. However, the momentum of the emergency situation vanished and the situation was later considered "normal", and the municipality from Rudňany has to compete for governmental funds with several hundred other municipalities which want to address the Roma housing problem. As one of the local council members put it in a personal interview in summer, 2004:

> We have asked for any help from the governmental office for minorities and you know, one official told us that they will label the situation here [in Rudňany] as an emergency and priority action only when somebody dies in the settlement [due to the sinking of the land].

The municipality has already bought land for the remaining public houses, and the Office of the Plenipotentiary of the Government for Roma Communities provided a grant for architectural design, but the government did not support this project. It is difficult to estimate if it was refused because of weak lobbying of the municipality or simply because it did not succeed in strong competition. The project was put on hold in 2004, and it was also not supported in 2005. In 2005 the whole amount of money planned for Roma housing projects in the Slovak Republic was only SKK 200 million[88], which is very small taking into consideration the scope of the Roma housing problem in the country.

5.3.2. The shantytown in Zabíjanec

This settlement is located directly in the former industrial zone. Two blocks of apartments there were built as administrative buildings of the mining company. The area served as a place for collecting metal ore and as a transport hub. In 1965 the company moved their activities closer to the actual mining sites, and the place was abandoned. A few years later (at the beginning of the 1970s) Roma moved into the abandoned buildings, and they have lived there ever since. Figure 12 shows the front view of the settlement in the summer of 2004. The concrete construction in the front is the former storage of poly-metal ores; the Roma houses are behind it. At the foot of the hill are piles of mining waste.

[87] Approximately 62 500 EUR.
[88] Approximately 5 million EUR.

Figure 12. The Zabíjanec settlement in Rudňany village

The settlement has one water tap with drinkable water for 469 inhabitants (as in the summer of 2004), behind one of the former administrative buildings. It is a pipe at the bottom of the hill. The source is a nearby reservoir in the forest collecting underground water. It also supplies the non-Roma part of the village. Shantytown inhabitants (mostly women and children) collect the water in bottles and jars and bring it into their houses. There is no sewage system or sewage treatment in the settlement. There are no toilets in the houses.

Sources of pollution in Zabíjanec are twofold. The first one is the surrounding area with toxic damps of mining waste. Since these dumps are on the slope above the settlement, when it rains and snow melts, a high content of heavy metals flows down into the settlement and the heavy metals are deposited in the soil (Koči et al. 1994, Ochodnicky 1996). Inhabitants then may bring this contaminated soil into their houses on their feet or breathe it in the dust during the summer (personal interviews, August 2003 and September 2004). The second source of contamination is the place itself. Since it served as an industrial zone there are residues of heavy metals, oils and other industrial materials in the soil. The municipality bought 15,000 m² of land for the resettlement of the people, but there is no budget for building the estimated 60 houses needed.

5.4. THE ENVIRONMENT AS AN OPPORTUNITY – ROMA COPING STRATEGIES

The Roma in Rudňany are extremely poor. The only income of the inhabitants is social assistance and *ad hoc* (usually) illegal work[89]. This could consist of cutting timber for households or labor-intensive activities in house maintenance. The effect of poverty in relation to the environment is twofold. Firstly, it increases pressure for legal or illegal exploitation of natural resources in the surrounding areas (namely timber collection and the harvest of various berries and mushrooms). Secondly, it determines the ecological footprint of the community[90]. It is not surprising that the ecological footprint of the Roma communities is extremely low compared to the majority population. Consumption patterns are also determined by the extreme poverty.

Practically nobody (with the exception of a few families practicing usury) owns a car. The main transport is done by walking, with sporadic use of public transport (i.e., the bus). Water consumption is relatively high due to the fact that the water flows unregulated 24 hours a day. Settlements are connected to electricity. Almost everything is recycled, reused or (in the worst case) burned.

The only source of energy for cooking and heating in the Roma settlements is firewood. Due to historical reasons (Roma are latecomers to the village) and the present poverty, Roma do not own any forest and usually can not afford to pay for firewood. Widespread usury further degrades the social situation of the Roma and for most of them the only possibility is illegal logging. This situation creates a permanent tension between the community, authorities and owners of the forests[91]. The situation is worst in the winter, when harsh climatic conditions in this region increase demand for the firewood. Owners and managers also complain about the devastating impact of the illegal logging on the forests and the environment. Roma, excluded from forest management and in permanent danger of being caught while logging illegally, do

[89] After the 2003 reform of the social assistance system in Slovakia, an individual family is eligible for maximum SKK 10,500 (approximately EUR 250) monthly, regardless of the number of children. Although the authorities never admit this, this provision is considered to be aimed at stabilization of Roma population growth through disadvantaging the bigger families typical for Roma.

[90] Sierra Club defines the ecological footprint as a calculation that estimates the area of the earth's productive land and water required to supply the resources that an individual or group demands, as well as to absorb the wastes that the individual or group produces. Available at: http://www.sierraclub.org/footprint/ [Consulted 28 January 2005].

not put much consideration into how they select what to cut. This means that they usually do not distinguish between high quality rare species of trees and trees suitable for firewood. The real scope of the logging is difficult to estimate, since many Roma and independent NGO activists are doubtful about the official estimates and blame non-Roma owners for using the Roma as an excuse for their own misuse of the forests[92].

Collection of berries and mushrooms does not yet represent a problem for forest management. The area around the village is not under a high degree of the environmental protection. Many trees and plants are heavily affected by the industrial pollution. It is very probable (although I did not find any relevant data from the region) that berries and mushrooms accumulate heavy metals from the soil. Fungi, in particular, are generally very good at heavy metal intake and thus are highly likely to be contaminated around mining waste sites. Another conflict-generating activity is collection and selling of metals. Roma systematically search the village and abandoned factory sites, break blocks of concrete for the metal wires inside or dig for abandoned cables. As an NGO activist working with Roma in Rudňany explains:

> Collection of metal is a good example how people misjudge Roma. I saw couple of chaps from Pätoracké digging a hole for 3 days because somebody told them there should be a copper cable down there. They are not lazy and they will work if they have an opportunity.

In the case where there are clear ownership rights the metal collection is a source of tension, although it looks as though this is already past its peak, since the amount of metal available for selling is already minimal. Forest exploitation or collection and management of waste are the areas where the environment represents a source of financial or in-kind income for the Roma.

Yet, the environment is also a source of stress. The Roma settlements in Rudňany are located in two environmentally dangerous spots with permanent threats to human health and life. It is therefore important how Roma perceive these dangers and what their attitudes are towards the environment. These two areas will be further explored in the section dealing with internal factors contributing to the present Roma position in society.

[91] The forests are partly state-owned, and partly belong to small private owners.

5.5. SOCIAL PROCESSES IN THE VILLAGE

5.5.1. History matters

We can not understand patterns, forms and roots of environmental injustice through snapshot analyses. The processes associated with the unequal distribution of environmental harm on the local level are very complex and dynamic. Contaminated places are the outcome of the mining and ore-processing activities during the centrally planned economy of the former state socialist regime. While there was a certain economic benefit from the exploitation, Roma were excluded from its distribution or at least they had very limited access to these benefits.

The life story of JB illustrates this point. Born in a Roma family in the nearby village of Porac, he moved with his family into Rudňany at the end of the 1960s. He was in his late 20s at that time. His family settled down in a hut in the central part of Rudňany and JB found a job in the mine. In his words:

> I came here [to Rudňany] because of a job and money. I worked before at a cooperative farm but they did not pay so well. My cousin lived here and told me about this…I worked in the mine for 20 years and now I have a miners pension, otherwise my family could not survive now …They [non-Roma] did not want us in the village and there were these houses here.

JB has lived in Pätoracké for more than 30 years. Most of this time he worked as a miner in extremely harmful and dangerous conditions. For around 20 years he woke up in the morning in a small hut built from scrap materials and went to the nearby mine. The salary was good and he was (and still is because of the miner's pension) able to support his family of 7 children and dozens of grandchildren.

Just before the collapse and closure of the local mining enterprise, JB retired. All his children are unemployed and his pension is a substantial part of the family income. JB suffers from

[92] Logging is strictly controlled by legislation and implementing institutions in Slovakia. It requires permission and must be compensated for through tree planting.

respiratory disease and after a life spent in hard work can not afford more than living in the same hut in Pätoracké.

This story illustrates that discrimination and social processes related to environmental injustice in the village are affiliated with two different types of regimes and ownership patterns. Both the former socialist regime and present liberal democracy created opportunities for discrimination and exclusion from society. JB's life story is typical of his generation, who were the first settlers in Zabíjanec and Pätoracké. Yet, why were (are) these people so vulnerable in society and what makes them victims in the power-struggle over the natural and societal resources on the local level?

Societal and environmental transformations are ongoing processes, and vulnerability is also inherently related to the unequal distribution of both power and entitlements within the community. In the following section I analyze entitlement to resources as the basic factor forming the social situation of the Roma and power-relations which have contributed to the present situation in the distribution of environmental benefits and harm.

5.5.2. Distribution of entitlements

The Roma in Rudňany are newcomers. What is even more important, they are poor newcomers. When they started to settle down here in the 1960s and 1970s, all the forests, agricultural land and mines were state property. After the communists seized power in 1948 they gradually nationalized the property of entrepreneurs and farmers in Rudňany. What was not state property belonged to individuals in the village. Roma were allowed to settle down because the factory needed manpower. The place in the village called Zimna Dolina (Cold Valley) was designated for their huts and dwellings. They did not have money to buy the land and it is questionable if the village would have sold it to them even if they had.

Their position was of an intruder who is useful for the time being, but who is not considered to be part of the society. Entitlement of these people thus did not include any power over the place they were living in. They were free to move, but they had nowhere to go. In the 1960s the community grew in number. The reasons why and how exactly the Roma resettled from

the village center to new places on the outskirts of the village are unclear after the almost 30 years since it happened. Most non-Roma I interviewed claim that the main reason was the growing size of the population and the need for space. This argument is doubtful in the light of the fact that there is still plenty of empty space in Cold Valley.

Roma carefully admit that there was some pressure from the side of non-Roma to move out of the village center, but they were not able recollect any incident or threat of action which would support this claim. As PF, a 47-year-old male Roma from Pätorácké put it during an interview in the summer of 2004:

> PF: Gadjos [non-Roma] did not want us in the village, they told us to leave.
>
> Q: Were you threatened to leave?
>
> PF: They said we should leave, so we did. I don't remember exactly, I was kid in those times. Somebody told us there were rooms empty [in the former administrative building]. It was also closer to my father's work.
>
> Q: Were you aware that this place may sink down and that there is dirty land around?
>
> PF: We were happy to have a place to stay. I want to move to these new houses but the mayor doesn't want to build more of them for us.

There is no written evidence about this resettlement. Municipal records do not exist (the village chronicle was stolen in the mid-1990s) and the Roma do not posses any written or recorded documents about this event. At the beginning of the 1970s they moved to the Zabíjanec and Pätorácké settlements, where their entitlement remained virtually non-existent. From public land in the village center they moved onto land belonging to the state-owned mining and ore-processing company. They do not posses any entitlement over the natural resources (e.g., land or forests) surrounding their settlement.

Social exclusion, discrimination, internal fragmentation and the weakness of social bounds within the community and with the outside world are key determinants forming the social situation of the Roma and influencing the past and present locations of their settlements in environmentally unsuitable conditions. We see here two groups (Roma and non-Roma). The

weaker ethnic group (i.e., the Roma) are susceptible to unequal treatment in the distribution of environmental benefits and harm.

The location of the weaker group has to be seen and analyzed in the multilayer relationships between the Roma and non-Roma. I consider entitlement over natural resources to be the key factor in framing environmental awareness and attitudes of Roma in the village. At the same time the entitlement has a key role in forming the relative strength or weakness of different social and/or ethnic groups. Management and exploitation of the natural resources could provide the following opportunities:

- A source of income and jobs;
- Capacity building for individuals;
- Enhancing environmental awareness;
- Providing space for cooperation among different groups and individuals.

The Roma do not possess any property rights and/or entitlement over natural resources. The land they occupy belongs mostly to the collapsed factory and sooner or later will be sold or transformed into the possession of a physical or legal entity[93]. The surrounding forests are managed by the state-owned forest company without any involvement of Roma in management and protection. Arable land and pastures are private and owned by non-Roma. Under these circumstances, the environment does not provide any longer term or legal opportunity for the people. It only contributes to the further marginalization of the community through exclusion from the environmental benefits and a share of the natural resources.

5.5.3. The 1970s until the present and Roma re-settlement

Lack of entitlement over resources, poverty and a different ethnic origin from the very beginning played decisive roles in the power relations between the Roma and non-Roma. However, the power relations in the village went through significant changes in the last 15 years. When the Roma first came to Rudňany in the 1950s, the dominant decision-maker was

[93] The factory left behind big debts and extensive liabilities (including environmental) and its market value is therefore problematic.

the mining and ore-processing company and its management, together with the local administration. This role was transferred to the municipality and elected mayor after the company collapsed in the beginning of the 1990s and governance went through democratization and decentralization processes.

When re-settlement of the Roma happened in the 1970s, the Communist Party of Slovakia had the decisive power in the village. It acted through two subordinate bodies: company management and local appointed administration. Most of the inhabitants were directly or indirectly (e.g., in the secondary school for miners, the local hospital affiliated to the company) paid by the company. The company built houses, supported social programs, set up two schools in the village and was involved in the decision-making process on any investment, policy or action to be undertaken in the area.

The mayor of the village (in those times called "Chairman of the Local National Committee") was directly approved for the position by the Communist party, as was the company management. This meant that the management of the company and Local National Committee were formally independent bodies, but in reality they were under control of the same party. This created a system of direct control in the village with very limited influence from the marginal inhabitants. However, the party did not want conflicts in the village, and a functioning economy and operating factory were the priorities. Therefore majority interests were supported unless they were not in opposition to the official policies of the party. The beginning of 1970s was a time of centralization and consolidation of the party after the occupation of Czechoslovakia by the Warsaw Pact and the collapse of the reform movement in 1969.

If Roma were pushed to leave their former settlement or if they decided to do so "voluntarily" is not crucial. As a result, Roma settled on the environmentally problematic sites with the silent and unwritten approval of the company and local authorities. In the period of concentrated power it is unimaginable that Roma would have been allowed to settle down there against the will of the party and its local executive bodies.

The other side of the coin is why the company and municipality did not provide Roma with company flats, when this was common practice for its non-Roma employees. JB's experience is typical for his generation. Like his Roma colleagues, he was a citizen of the socialist

regime, which verbally claimed that the working class is at the center of attention and support. I had the following exchange with a retired (non-Romani) foreman from the mine:

> I used to have a couple of Tsigany [Roma] in my team. I had never complained about them. They knew how to work, they just had some problems with discipline, after every salary there was a fiesta in the camp [Romani settlement]…Everybody knows they destroyed everything they got. They had the same access to support as I did. I built my house on my own, I saved money, took loans, they spent whatever they received. Even now, why these houses [newly built municipal flats for Roma]? Who is going to build a house for my daughter?

While fellow non-Romani miners were living in block apartments built by the company and given to the employees practically for free, JB spent his time at the place surrounded by mining waste and in constant danger of landslides. The system of subsidised apartments or low- and no-interest loans for housing construction was practically unreachable for him. To receive a flat from the company required a substantial amount of time, energy and know-how. The flats were assigned based on a complex system of the applying person's work evaluation, the Communist party and trade union recommendations and, last but not least, personal contacts.

Despite the fact that I did not find indications of corruption in this system, two (non-Romani) miners interviewed described this process independently as long and complicated. Moreover, people sitting on evaluation committees were often themselves inhabitants of the blocks of apartments. Their willingness to allow Roma families to move in was minimal. In informal talks I held with inhabitants of the flats they shared an openly anti-Roma position that could be summarized in the following way: Roma were working with us in the mine and as individuals they are fine, but we would never allow them to live next door. They have big families and once you allow one of them to move in, they bring another 20 relatives along.

The fragmented Roma community, cut off from the decision-making process, had practically no influence on its future. Political organization and activism were allowed only in organizations under direct control of the Communist Party, and the party was dominated by

non-Roma[94]. This resulted in a *status quo* where Roma worked in the company and lived in places endangered by landslides and industrial contamination, but had work and stable incomes.

The collapse of the mining company, democratization and the withdrawal of the Socialist Party from power are the corner stones shaping power relations in the village since the beginning of the 1990s. These changes found the Roma in Pätorácké and Zabíjanec unprepared for change and have had a devastating impact on the communities. Human rights, freedom of speech and the end of the one-party dominance have been accompanied by economic hardships, unemployment and diminished opportunity.

5.5.4. Social and economic transformation and the people in shantytowns

Among the key external factors contributing to the social exclusion of people from the shantytowns are: (i) Differentiated treatment; (ii) Local governance; and (iii) Differentiated impact of economic and social reforms. Roma are treated differentially. Ethnic prejudices, and open and latent racism are the key factors shaping the relationship between Roma and non-Roma. Prejudice is widespread, and the most common descriptions of Roma charaterize them as lazy, unable to take care of their life and children; they are often labeled dirty and smelly. These prejudices were often mentioned in informal conversations with non-Roma.

A widespread perception is that Roma do not deserve any better accommodation because they will only destroy everything anyway. This opinion is based on the experience from the past, when the former socialist government built public houses for Roma in many villages in eastern Slovakia and moved them into these places without any preparation or social work[95]. The authorities also often put together groups and families on a very different social level, with different cultural heritages and habits. These sparked conflicts among the inhabitants and destroyed the social hierarchy.

[94] In fact I did not find any member of the former Communist Party among the Roma, while at least five non-Roma, including present municipal council members, admitted that they were (or still are) members of the party.
[95] This happened, for instance, in nearby Krompachy and in Košice.

Many people from shantytowns had no previous experience with life in apartments. They were not able to manage (for them) complicated devices such as gas heaters, or water closets and they soon destroyed the places. The fact that these flats were given to them for free contributed to the low perception of ownership[96]. These experiences formed prejudices and influenced situations in the village, since any effort to address the Roma housing problems are perceived as useless and wrong. Or, as a council member in the village mentioned in an interview: "It is not something that will help you to get elected to the city council" (personal interview, August 2003).

This comment relates to the second factor: local governance. The Roma as a group are fragmented, and many of them are below 18 (thus not eligible to vote). These circumstances lead to the present situation where they are not represented in the city council, which has decision-making power over the budget and many other Roma-related aspects of life. Power delegation in the elected municipalities was not supported by sufficient financial sources and found local municipalities unprepared. Prejudices and deeply rooted antipathy against Roma have influenced the decision-making process, which is entirely under control of non-Roma.

Roma are poor and their only source of income – social assistance – is decreasing, while their ability to find any job is decreasing as well. Negative trends started at the beginning of the 1990s and were reinforced at the beginning of the 2000s by social reforms of the newly elected center-right government. Cuts in social assistance, introduction of payment for health services, increase of taxes on food and deregulation of prices of energy and water further deteriorated the social situation of the community[97].

5.5.5. Roma and their environmental awareness

Contrary to widespread prejudices among non-Roma, Roma are not "dirty" or "careless" about their houses and their environment. Most huts and houses I visited were very clean and

[96] Experience from socially sensitive housing projects (e.g., in Spisske Vlachy) show that Roma do value their houses and maintain them if they are well prepared, involved in the construction and consulted and trained during the resettlement projects.
[97] As the result of flat-tax introduction, the VAT for food and beverages increased from 6 to 19% in January of 2004.

neat. Washing of clothes is a daily routine for Romani women. However, their poverty is also reflected in the quality of clothes they wear. Roma do not store once cooked, fried or otherwise prepared food. Everything that is not consumed the same day is considered to be waste and is thrown out. Although families are often extremely poor, they keep this habit even if they posses a refrigerator or it is a cold winter.

When asked why they do this, the typical answer is that it is not good or that everybody has done this for generations. In an environment rich in insects and limited in the access to water, this rule is very important for preventing infectious diseases. Washing clothes and food storage could be part of the cultural heritage Roma brought from the old homeland in India, where these practices are part of the protection against disease. These two examples show that Roma understand the importance of a clean environment for a healthy life. Most families in settlements have witnessed the chronic diseases and death of men who used to work in the mines. As a Romani woman said during an interview in summer of 2003: "My Janko worked in the mine on the upper corner. More than 20 years and he died, he was only 45 . . .They inhaled this bad air in the mines. All these men are gone. They were dying fast."

The relation between "bad air" in mines and premature death was common knowledge among the people in the settlements. It was more difficult to link the mining waste surrounding the Pätoracké or the polluted soil in Zabíjanec to concrete heath problem and threats.

The conclusion of my observations and interviews is that the Roma mostly understand environmental threats if they are visible (e.g., dust in the mine resulting from drilling or explosions), while the not-so-visible pollution of soil is neglected. They do not perceive the level of contamination as the most acute problem. Most of the people have lived all their lives surrounded by mining waste. The older generation worked in the mines and the younger was born on these waste dumps. The specific situation in Pätoracké is imminent and visible, where there is a threat of landslides and the danger that the houses will sink. The environment was not used by any respondent as an argument for solving the critical situation in the settlements with the exception of the threat of landslides.

Most of the respondents appealed to the difficult social situation, danger of epidemics, inadequate construction of houses and the number of people per square meter as the reasons for resettlement. However, the environment was often indirectly mentioned. This example is

from an interview with a young Romani male around 30 years of age in Zabíjanec in September 2004:

> Q: Do you think if the mayor built houses for you on the same place as the current camp is, everything would be all right?
>
> A: I don't want to live here. It is dirty here. I want a house somewhere else, closer to the village.
>
> Q: But this dirt could be cleaned and removed, don't you think?
>
> A: Everything is dirty here. It is not our work, we did not do this, gadjos made this place dirty. This is no place for men. Just look at this red mud everywhere.
>
> Q: Do you think people are ill because of this red mud?
>
> A: Everybody is sick here, there is something …kids are ill all winter long, there is not enough firewood, the water pipe is frozen in the winter [the only source of drinking water for the community].

People in Zabíjanec and Pätoracké know that these places are not suitable for living. Although they do not specifically speak about environmental threats, they understand that there is something wrong with living on a derelict factory site or on top of a former mine. The problem is that in the situation where even the danger of landslides and casualties is not sufficient to deliver prompt action, the slow health impact of the polluted environment is not considered serious enough by the competent authorities. The Roma themselves do not believe in radical responses and mostly accept these risks as part of daily life.

The Roma's perception of the environment is formed by at least three strong factors: firstly, as a lack of entitlement to the natural resources; secondly, the environment as a source of danger; and thirdly, the environment as a source of income. All three contain the motif of exclusion — exclusion from ownership, exclusion from management and exclusion from legal recourse.

Lack of entitlement over natural resources and the practical exclusion of Roma from the management of natural resources contributed to the situation where Roma often see nature as

the property of non-Roma. Any environmental protection is seen as a tool to further exclude them and limit their access to the environment. These perceptions are highly visible, especially in the case of forest management and protection.

The forests surrounding the village belong to the state and are managed by the State Forest Company. None of the Roma is employed by the company at any level. Some Roma were employed as workers at the company prior to 1989, but were among the first who lost their jobs. The forests are the common property of the people, but when interviewing Roma in both settlements in Rudňany, the most general attitude was that the company and forests belong to the "whites" and the Roma have no rights to the forests. A middle-aged Roma male position illustrates this point:

> A: They took this forest. It is theirs [i.e., belonging to non-Roma].
> Q: Do you think it was always like this?
> A: It was always like this. Now Roma have no rights.
> Q: But the forest is still state owned and you are also a citizen of this country.
> A: I don't know, I don't think. It is not ours and it will be even worse.
> Q: Why worse? What do you think may happen?
> A: They will not let us in.

Perception of ownership and entitlement to natural resources changed in the 1990s. The transformation of property rights created a strong impression among the Roma that everything has an owner. Nature is therefore often labeled as "theirs", "property of the whites" or "belonging to the mayor".[98] The need for environmental protection is then seen only as an additional means for Roma exclusion.

5.5.6. The people and their political organization

According to Slovak legislation, the village Rudňany is governed by an elected mayor and 10 council members. The mayor and the council possess decision-making power in all areas of daily management. This includes management of public services, planning, investment

decisions, and budget distribution. The budget comes from local taxes and a central government contribution.

The last elections took place in 2002. The mayor was elected as an independent candidate, while 10 members of the council represent four major Slovak political parties (Movement for a Democratic Slovakia – 3 places, the Christian-Democratic Movement – 3 places, the Party of the Democratic Left – 3 places and the Slovak Christian-Democratic Coalition – 1 place). The Roma, who roughly consist of one-third of the village inhabitants, do not have a single member in the council. All 10 members elected as candidates of the four political parties belong to the majority population, and the Roma were not able to unite and agree on their candidate (who could have applied for the position as an independent candidate or as a candidate of one of registered Roma[99] political parties).

There are several factors contributing to this Roma failure. The biggest is the problem of internal fragmentation in the community, where there is open and hidden hostility between the inhabitants of Pätoracké and Zabíjanec, as well as within these two communities. It is also a problem of the absence of generally accepted leaders, because in practice the only people who are accorded some respect are directly or indirectly connected to usury. Voters in the village are mostly non-Roma. Although the Roma number as many as 38% of the total inhabitants, when we break this figure into the age categories it is evident that the number of eligible Roma voters (above 18 years old) is less then 25%. In the category of people above 60 years we find only 15 Roma out of the 354 people. These figures are evident from the Table 6[100].

[98] For Roma the mayor symbolizes power in the village and they simplify his position to that of the ultimate ruler and decision-maker in the village.
[99] There are currently 14 registered Roma political parties that are officially united in *Coalition Council of Roma Political Parties.* In reality they compete with each other.
[100] The decision on who is Roma and who is not in the data collection was done by the municipality based on their perception.

Table 6. Age structure of Rudňany inhabitants as of February 28, 2003

AGE	*Up to 3*	*4-6*	*7-15*	*16-20*	*21-60*	*61 and over*	*Total*
Total	309	221	591	305	1531	354	**3,293**
Roma	242	141	313	133	415	15	**1,259**

Source: Rudňany Municipality records. Published also in *Horizont*, Vol 10, No. 2, February 2003 (Monthly newsletter published by the municipality)

The mayor and municipal council are directly elected by the village inhabitants, who often hold strongly anti-Roma opinions and prejudices. As an illustration, I set forth my personal experiment. Several local Roma complained that if they visit one of two local restaurants, they never get their drinks in glasses, but always in disposable plastic cups, in order to prevent a non-Roma getting the same glass the next time. I invited two young Roma to both places and in both cases my drinks were served in a glass while they received theirs in plastic containers. This practice was considered "normal" by the waiters and non-Roma in the restaurants. This reflects the image of Roma among the non-Roma as "dirty" and inferior.

Under these circumstances the people who form the local government balance between popular anti-Roma prejudices among the voting majority and pressure from the central government and NGOs to address problems of the Roma community. In practical terms in Rudňany if this means the decision to release money from the municipal budget for the local football club or for projects addressing Roma needs, the football club often wins. Nevertheless, times are changing and the justification of the local council member in the interview already contains sentences on football as a place for interaction between Roma and non-Roma youth. This would not have been the case several years ago. As one of the NGO activists recollect:

> A few years ago when we discussed with the municipality the need to address Roma problems people were almost jumping on the table; one council member went regularly out to the corridor and shouted "to hell with all these NGOs". After several years they understand we have to do something for these people and we have to do this together. Now they are coming to us with ideas for what to do and what projects we have to underwrite.

These remarks on the changes highlight the importance of external agencies (namely NGOs) in setting the agenda and positively influencing the decision-making process. However, it is a long and slow process of Roma emancipation and it will also depend on the Roma themselves, their ability to unite and formulate their interests.

5.6. RUDŇANY AS A CASE OF ENVIRONMENTAL INJUSTICE

Roma are born separately, live separately and if you visit the graveyard in Rudňany, you will find that they are also buried separately. Socio-economic and environmental stresses divide this village nowadays. Not that the village was not split in the past, but there were multiple interactions between the majority and minority through work in the same company.

The results of the field research and evaluation of indicators of environmental justice (e.g., relative environmental characteristics in the Romai and non-Romai parts of the village, distribution of the environmental threats) support the claim that Rudňany is an example of unequal treatment when it comes to the distribution of environmental benefits and harm. History matters and the current pattern of this distribution is closely related to social processes in the past and in the present.

Weinberg (1998) points out that learning how groups come to be exposed to toxic wastes requires an understanding of the organizational processes that shape decisions regarding production practices and regulatory enforcement strategies. I would add that it is equally important to understand the situation of the minority in a context of minority-majority relations and the general circumstances of human rights and development policies.

The situation of the Roma living in Rudňany is alarming, and the environmental threat they face is unequally high compared to the majority population. Nevertheless, environmental concerns are not high on the agenda in the ongoing discussion between the community, local municipality and other involved stakeholders. The case is framed, more or less, as a purely social issue (Zabíjanec and Pätoracké) and social and/or emergency situation (Pätoracké).

Several reasons for this framing may be identified. First of all, the social situation of Roma living in these shantytowns is bad. I visited cellars where families of up to 10 members live and sleep on a concrete floor a meter below the surface. In Pätorackė the houses could sink at any minute. Environmental awareness among the Roma community and local municipality is relatively low, however, and environmental concerns are often seen by respondents as marginal or important only in the longer run.

The logical concern then would be what contribution the environmental justice concept may have in addressing cases of these marginalized communities. Agyeman claims (Agyeman *et al.* 2002) that "one explanation for the success of the environmental justice movement can be seen in the mutual benefits of a coalition between environmental and social concerns." This statement is also valid vice versa. It means that social problems could be more successfully addressed if they were accompanied by environmental concerns. Rudňany represents a case where environmental justice argumentation may provide an additional argument and reason for immediately addressing the situation of the Roma in shantytowns.

The contribution of environmental justice may be seen also in affecting the agenda of the municipality and changing the attitude of the inhabitants towards recognition of the importance of placing any short and long term planning and development into the context of equity, social, human and environmental rights. Distribution of the environmental harm and benefits in the village also reveals the importance of entitlements over natural resources for the formation of relative strengths or weaknesses of different social and/or ethnic groups. The management of natural resources (i.e., the distribution of land for settlements) is the key factor in the origin of environmental injustice cases as well as the key factor in addressing these cases.

There is an interesting parallel in the situation of the Roma and the former non-Roma inhabitants of Pätorackė. In the 1970s, when the first signs of potential landslides and subsidence were detected, there was immediate action and all the people were moved from there to new flats and houses. Those people were the "elite" in the village (administrators with the company and prominent employees). In the case of the Roma, it took almost 30 years and the first real landslide in 2001 to force any action. There are still 300 people living there with an unclear future.

In the next chapter I analyze the distribution of environmental benefits and harm in the case of three Roma settlements in the Upper Svinka watershed region. The region has a rather different history compared to Roma settlements in Rudňany and different types of environmental threats. The intention is to compare different kinds of environmental injustice and through the differences and similarities shed better light on the formation of inequalities.

CHAPTER 6. A CASE STUDY OF THE UPPER WATERSHED OF THE SVINKA RIVER

The Svinka River's upper watershed region is located in the northeastern part of Slovakia. Agricultural land of low hills and forests was not used for industrial production. In the former centrally planned economy this area served as a source of labor for the nearby cities of Prešov and Košice. Cooperative farms and the state-owned Forest Management Company were the main sources of employment for those who did not want to commute or resettle. The region has been going through significant economic and social transformation since the beginning of the 1990s. This transformation meant new economic and life opportunities for some and a worsening of the social situation for others.

Figure 13. The Upper Svinka River watershed: the case study location

For the purpose of this case study I selected three villages in the region: Hermanovce, Jarovnice and Svinia. They are 10 to 15 km from each other and on the map they represent a triangle (see Figure 13). The Roma shantytowns (located in each of them) are separated from each other by several kilometers, but the people meet regularly, including mixed weddings and many social encounters. Although belonging to different municipalities, their lives and problems are very similar and one can find general patterns in their position in society and access to social and environmental resources.

In the first part of this chapter I focus on a detailed description of each of the three villages, with a focus on Roma access to environmental benefits and their exposure to environmental harm. Environmental conditions in the villages and Roma shantytowns are discussed with a focus on access to water and coping strategies involving nature.

In the second section I analyze the present distribution of environmental benefits and harm. Identifying unequal access to water and sewage treatment, as well as exposure to regular floods are the central outcome of the field research. The forms and scope of environmental injustice are then discussed within the framework of the past and present social processes associated with the inequalities.

6.1. THE RESEARCH SETTING AND DESCRIPTION

The village of Jarovnice became well known in Slovakia after a disastrous flood in the summer of 1998 left 47 dead. Of the 47 victims, 45 were Roma (42 from the shantytown in Jarovnice). These figures require closer investigation. Why were Roma so highly represented among the victims? The initial pilot study I did in the summer of 2003 confirmed my assumption that there is a clear pattern of discrimination in the distribution of environmental impacts typical for this area. I also realized that enhancing our image of the place would require a broadening of the scope of the case study. I also decided to add two places (Hermanovce and Svinia) in order to better understand unequal treatment and differentiated access to natural resources.

All three places also fulfill my initial criteria: (i) Ethnic characteristics – strong Roma minority; (ii) Clear ethnic division between Roma and non-Roma settlements; (iii) A social situation with negative economic impacts from the economic transformation on the inhabitants and widespread poverty (not only among the Roma population). Distribution of environmental benefits and harm was at the center of my research in these three small eastern Slovak villages. The research was guided by the following objectives:

1. To examine the historical, social, political and environmental context that has influenced the present location of Roma settlements in the three villages;

2. To study the power relations that shape the lives of the majority and minority in the villages (What is the political organization in these communities? Does the ethnic minority have any access to decision making at the local/regional/national level? Do some groups and individuals control other groups and individuals? If so, how?);
3. To determine the social processes that contribute to unequal exposure to risk (Was the present (or past) impact of floods discriminatory against some of the inhabitants? If it so, then why?);
4. To ascertain whether access to drinking water and sanitation is equal or unequal for the Roma minority and non-Roma majority (If so, why? What are the factors contributing to differentiated access?).

These questions guided my field research in the villages, which was done in three stages (pilot study in August 2003, in-depth field research in April 2004 and follow up research in July-August 2004 and two short-term visits in the summer of 2005).

6.1.1. The villages, people, and environment

Administratively the upper watershed of Svinka River is part of Prešov County, while selected villages belong to the districts of Prešov (Hermanovce and Svinia) and Sečovce (Jarovnivce). The settlement pattern is characterised by small villages with between 1,000 and 3,000 inhabitants. There is practically no industry in the area (with the exception of several small sawmills) and most of the inhabitants are employed either in agriculture (mostly former cooperative farms now turned into private farms) or commute to the nearby industrial city of Prešov. The region has a relatively high natality rate of 13.03 children per 1,000 inhabitants. Unemployment in the region is around 23% (December, 2002), while in many Roma settlements it is usually close to 100%[101].

The region is located in northwest Prešov county, which is characteristized by low hills (maximum 600 to 700 meters above sea level), mixed forests and agricultural fields. The

[101] According to the Economic and Social Development Plan of the Prešov Region. Available at: www.Prešovsky-kraj.sk [Consulted 21 January 2005].

Svinka River collects water from the hills of Branisko in the central part of this region. The water collected by the Svinka is part of the Tisza River watershed.

There are no protected areas; you can not find cultural monuments or significant cities here. It is a region which was for centuries somehow off the beaten track of history and development. This relative peace and "invisibility" could be among the reasons why this place was so popular for Roma settlement — their shantytowns are in almost every second village.

6.1.2. Social and economic situation

Economic transformation after 1989 brought with it the collapse of traditional industries and many cooperative farms, with massive downsizing of employees. This was especially the case of low-skilled jobs and professions. There has been a gradual revitalization of industry (especially in Prešov) and some of the cooperative farms now operate as private companies. However, to keep a job or acquire a new one usually requires higher education and/or the need to commute[102].

In the Prešov region the rate of unemployment was 23% in 2004. The average salary in the region was (as in 2003) only SKK 11,792 (EUR 290), but for unskilled workers it was only in the range of SKK 6,000 – 8,000 (EUR 150 – 200)[103]. However, even these low-paid jobs are practically unreachable for Roma. Cases of refusals to employ Roma were mentioned in interviews by Roma, social workers and NGO representatives. As a male Roma in his 40s summarizes: "When I made a call [to apply for a job] it was good, they said they need me, when they saw me that I am black, the job was already occupied" (personal interview, Svinia, August 2004).

The main employers in the three villages are cooperative farms. The agriculture is focused on wheat and potato production and cattle and poultry breeding. Arable land represents 42.8% of the agricultural land, but out of this as much as 55% is classified as low-productive land.

[102] The distance from Svinia to Prešov is about 10 km, Hermanovce – Prešov about 25 km, and Jarovnice – Prešov, 20 km.
[103] Web site of the Slovak Ministry of Labor Social Affairs and Family (www.employment.gov.sk) [Consulted 21 January 2005].

Cooperative farms were the main employers for the Roma prior to 1989. I did not find regional (eastern Slovakia) data on the employment of Roma in the past, but according to Šebesta (2005) "by 1967 the [former] regime reached 75.9% employment of the Roma male population in Slovakia." Given the fact that unemployment was a violation of law (in the former system of state socialism) it is realistic to assume that the figure was not very different in the late 1980s. In the 1990s it climbed to almost 100% unemployment in all three shantytowns included in the research sample. Unemployment of non-Roma in the same villages was around 30% (in 2004).

6.1.3. Environmental conditions

The pollution exposure in the region can be described as relatively low (SEA 2002). There is no heavy industry or mineral deposits. The nearby city of Prešov is a relatively big source of air and water pollution, but the impact is negligible in the area of the case study[104]. The main sources of pollution are agricultural production and household waste. Cooperative and private farms are using industrial fertilizers that end up in the surface and ground water, which has a strong impact on the water quality in the region (i.e., Svinka River water).

Household waste is a growing problem for the municipalities. The amount of waste has steadily increased since the beginning of the 1990s[105]. A deteriorating social situation and increasing fees for waste collection make it hard for many people to pay for these services. The solution for them is illegal dumping. In the case of the Roma settlements, dumping waste in the vicinity is common practice. Mismanagement of forests and water catchment areas, clear cutting and illegal logging are environmental problems with impacts on the water-retention capacity in the area contributing to flood intensity.

[104] The case study area is upstream from the city and not in the direction of prevailing winds.
[105] Opening of the economy brought greater competition, reflected in the growing amount of packaging waste (often non-recyclable). Consumption patterns of the inhabitants also changed. Due to the policy of subsidies in the EU, some products are cheaper to buy than producing at home.

6.2. THE ROMA IN HERMANOVCE, JAROVNICE AND SVINIA

Reportedly, Roma have lived in the area for several centuries. There is no exact date when they arrived. At first it was small groups of traveling nomads; at the beginning of the 15th century, there was new, large-scale immigration into the Pannonian Basin. This substantially increased the number of Roma in the area (Jurova 2002). In the 18th and beginning of the 19th century Roma were already mostly settled down. They found work in villages as blacksmiths, craftsmen or as seasonal workers for local landlords and farmers.

The region was one of the backward regions in the former Austro-Hungarian Empire, and it stayed at this level also in the newly constituted Czechoslovak Republic after World War I. Although Roma were always on the outskirts of society, demand for labor and general dependency on farming made them an important part of the villages' economic systems. Most of the non-Roma were as poor as the Roma, and the difference between these two ethnic groups was not so significant as it became later. An important factor in relations was the size of Roma settlements on the village outskirts. They were usually very small. Although there are no census data available, according to inhabitants of the villages, Roma settlements (prior to World War II) were no bigger than several families, which meant around 100 people in Jarovnice and about 70 in Svinia[106].

Two very important events for the Roma communities were World War II (and specifically the Roma holocaust) and post-war socialist industrialization (including new policies for their integration). The Roma holocaust directly affected communities in the region since several families were deported to concentration camps[107]. The post war period meant a new era for the Roma. Although the former socialist regime was generally not very successful with its integration policies, it succeeded in providing employment opportunities for people and (in the case of Svinia) built public housing for the former shantytown inhabitants. It suppressed any independent self-governance of these communities, however, and deepened the dependency of the Roma on the state.

[106] This estimate is very difficult to validate. It is based on estimations of Roma and non-Roma interviewed during the field research.
[107] Milan Smicka Foundation from Bratislava started research in the beginning of the 2000s on the scope and impact of the holocaust.

Table 7. Basic demographic and environmental characteristics of three Roma settlements

Name of the settlement	*Number of houses*	*Number of Roma inhabitants*	*Total number of inhabitants*	*% of Roma in the village*	*Proximity to the village (in km)*
Jarovnice	340	2,998	4,051	80	0
Hermanovce	49	363	1,467	25	0
Svinia	105	686	1332	51	0.45

Source: Field research results triangulated with data from the Office of the Plenipotentiary of the Slovak Government for Roma Communities, and 2001 census data.

The beginning of transformation in the 1990s had a strong social impact on the communities. It brought political freedom for all, but it also meant a social and economic fall for most Roma families. Nearly every settlement suffers from complete unemployment and deepening social crisis. The scope of the problem is clear when we see that it is a problem of hundreds, or, as in the case of Jarovnice, almost 3,000 people. See Table 7 for more details.

6.2.1. Shantytown in Hermanovce

All of the Roma in Hermanovce live in a separated shantytown between two forks of the Svinka River, which creates a small island in the lower part of the village (see Figure 14). The space occupied by the shantytown on the island is no larger than 200 m³ and it serves as the living environment for people in approximately 25 huts, mud houses and shelters. Some Roma also live on the slope above the island. The village granted permanent residency to 363 Roma (as of July 2004), while there are several people who can not get a residence permit or are registered in other municipalities. It means that the total number of inhabitants is around 400 people. The space is overcrowded.

Figure 14. The Roma shantytown in Hermanovce

Photo: Courtesy of Anna Stoecher

As in the summer of 2004, a total of 1,467 non-Roma were living in the village, separated from their Roma neighbors from the cradle to the grave. Children attend segregated "special schools", and there is a separated shop and pub, and a separated place in the cemetery. Roma own practically nothing. Natural resources and properties in the village are either private (agricultural land, pastures, a small area of forest), state-owned (most of the forests) or municipal (agricultural and other land). Theoretically, they are stakeholders in the management of municipal and state properties, but practically they are not part of the decision making. The municipal elections in 2002 had only one candidate (independent) from the Roma community, and despite the percentage of Roma in the village (24.7%), he was not elected[108]. The village council consists of representatives of the Christian Democratic Movement, the Movement for a Democratic Slovakia and the Party of the Democratic Left.

[108] Besides internal fragmentation it is also because of the low average age of the Roma. According to the Slovak constitution only persons of the age of 18 and more are eligible to vote.

The settlement is built on land which can not be classified as a wetland. It is solid ground but if you dig a hole deeper than a meter, it is immediately flooded by ground water and thus not suitable for construction of normal (brick or wooden) houses requiring a solid base. The settlement consists of poor houses constructed from waste wood, tin and mud. In the 1940s and 1950s Roma moved into two abandoned houses which were close to the current settlement and which were empty after the owners had died. Nobody else was interested in living in the area in those times. The land where the settlement is located belongs to the village. The landfill for municipal waste is located in the same part of the village as the Roma settlement, on the slope above the Roma. The landfill is not protected against leakage and is practically unprotected against Roma (and especially their children).

There is almost 100% unemployment in the settlement (in 2004 only two people were employed by the municipality and a local entrepreneur). In the whole village there are 300 unemployed people (a third of them Roma). The village inhabitants are predominantly Catholics (there is only a Roman-Catholic church in the village), but there has been no attempt to involve the Roma in religious activities. According to social workers, the local priest is not cooperating with Roma and NGOs.

The village is buying out land from individual owners (using money from the Roma grants supported by the Slovak Government) and public housing will be constructed with financial support of the European Union. In the first stage, 34 flats are planned for construction. In the second phase, additional flats are planned and the shantytown is supposed to be closed. The village plans to build two separate areas with municipal public housing located further down the stream, moving the Roma even further out of the village.

The planned construction poses serious questions to the further development of the village. It is very probable that (later) independent social infrastructure in these remote settlements of public housing may evolve (potentially including their own shops, schools, or church). This could accomplish total segregation of the Roma from the village. The final stage will apparently be administrative segregation. The village also plans (as a part of this development project) to build public housing earmarked specially for non-Roma. This will be located directly in the village center.

6.2.2. The shantytown in Jarovnice

Jarovnice is a small village in the Upper Svinka Watershed. According to official figures, 2,998 of the 4,051 registered permanent residents are Roma. Governmental figures from 2000 admit 170 dwellings in the shantytown. My estimation from 2004 is that the shantytown is comprised of around 200 dwellings and shelters. The Roma live in extreme poverty with almost 100% unemployment and virtually the entire population is on social assistance. The shantytown went through significant growth in the last 60 years. Reportedly, there were only six Roma houses (or huts) in the beginning of 1940s. Old inhabitants estimate the number of these houses to have been between five and 10 in the same years.

Growth increased demand for potable water. Wells (dug privately and uncertified by a health authority) are the only source of drinking water for the community. Inhabitants of the Roma settlement do not have equal access to the water. The village has been ignoring the settlement during the construction of the municipal public water supply and the Roma population of some 3,000 people is fully dependent on several wells for their needs.

Figure 15. The Roma settlement in Jarovnice

Photo: Courtesy of Karin Larsen

Many Roma (some of whom survived the holocaust) settled down here after World War II, while others came after the enforced law prohibiting nomadic lifestyles in the 1950s. They found a place on the bank of Svinka River, built their village with their own skills and without any assistance from the government. The settlement consists of brick houses, various huts, mud houses, and shelters (see Figure 15 for illustration). No house inhabited by people from the majority population is built on the riverbank. They are all on the slopes of the valley.

There is no sewage system in the village; malnutrition and sickness are common. None of the elementary school graduates continue their education, and practically nobody gets a job after graduation. Because of the high number of Romani children, the average age in the village is only 23 (summer 2004).

6.2.3. The shantytown in Svinia

Svinia Village is located in the eastern part of the Upper Svinka Watershed in proximity (10 km) to the county center of Prešov city. In the official census of 2002 only 27.1% (or 360 people) among the inhabitants in Svinia declared Roma nationality. Estimates by NGO activists and people working with the community are significantly higher: around 684 people, while the "majority" population of non-Roma is 648 people[109]. This means that in practice the Roma in the village outnumber the non-Roma.

There had been two Roma settlements in Svinia prior to the 1980s. The locals call them "hamlets" (lower and upper). The upper hamlet, located in the village, was torn down and destroyed in the 1980s, and Roma were moved into the second settlement — the lower hamlet. The official reason was that the government had built public housing in the lower hamlet. However, there was no discussion about this resettlement and some Roma still feel this as aggression from the side of the majority and a way for non-Roma to push them out of the village. The four blocks of public houses built in 1986 – 1989 are one of the last projects of the former regime's policy of Roma integration.

Four two-story housing blocks (each with eight low-standard flats) were built. Two previously separated communities were forced to live together and share the space, which opened latent tensions among the people in the lower hamlet. They now live in four blocks of flats, which feature eight flats each — altogether 32 flats. Some 50 huts were built later, as seen in Figure 16, as the number of people increased.

[109] The municipality census from December 2003 came to the number of 741 Roma.

Figure 16. Roma shantytown in Svinia.

Source: www.roma.sk/kcpro/svinia.htm [Consulted December 12 2006].

Approximately half of the people in the village are Roma. The local municipal council has nine elected members, none of whom are from this ethnic minority. Internally fragmented, the Roma are not able to agree on common candidates and in the last election they voted for candidates who virtually bought their votes with food and small gifts (interview with social worker, August 15, 2004). The council has developed a rather hostile attitude towards the minority in the village, reflecting (to a great extent) the general attitudes of non-Roma towards the Roma.

On March 28, 2003, the municipality adopted a promulgation terminating the activities of several NGOs in the territory of Svinia[110]. This legally obscure act reveals the opinion on the part of the municipality that the problem lies in the publicity of the Roma problem, not in the situation of the Roma community as such. Most of the Roma I interviewed feel hostility from the majority: "They don't like us. They [the majority] don't want us here and they would do anything to get us out of here. We don't have a problem with them; they have a problem with us." (Personal interview with Roma inhabitant of Svinia in May 2004)

The recent history of the Svinia housing project serves as an illustration of this point. The village has been (since the beginning of the 1990s) one of the targets of development NGOs in Slovakia, and there have been several projects focused on improving living conditions in the shantytown. The most ambitious project was initiated by University College of Caribou (British Columbia, Canada). Project Svinia, which involved the NGO Habitat for Humanity, and international and local activists attempted to build up to 30 family houses for local Roma in the part of the village known as "Borovy haj". The project was later (after increasing the number of planned houses to 70) included in the EU PHARE program and reached the stage of initial preparations.

The only responsibility and liability on the side of the municipality was to provide land for these houses. The Ministry of Construction and Regional Development also supported the project idea and it therefore generated a great deal of optimism among the involved stakeholders that the drastic social and environmental situation of the Roma in Svinia would soon be addressed. However, a new mayor and local council elected in December 2001 effectively buried this project idea by canceling the decision of the previous council approving the construction work in Borovy haj. They changed the locality of the Roma project, which practically eliminated any chance to obtain a PHARE grant, since it would require submitting a new application and starting up the complicated procedures once again. As the result, several years of NGO work and lobbying were lost and there is minimal chance of receiving new funding for Roma houses in the foreseeable future[111].

6.3. THE ENVIRONMENT AS A THREAT – A TALE OF WATER

Access to water and exposure to floods are the main areas of differentiated treatment in access to environmental benefits (i.e., clean, potable water) and different exposure to environmental threats (i.e., floods). Roma in the three shantytowns have regularly had problems with the supply and/or quality of potable water. The area is often flooded as a result of mismanagement of the water catchment areas and extremes in climatic conditions which are

[110] I.e., Habitat for Humanity International and Canadian International Development Agency.
[111] For details of this case see Alexander Mušinka: *Report on the field research into the housing situation of Roma in the village of Svinia*, Slovakia. Available at: www.errc.org/rr_nr4_2003/research1.shtml [Consulted 5 September 2005].

increasingly affiliated with climate changes. These factors contribute to the present inequalities among the majority non-Roma and minority Roma population.

6.3.1. Water and the people

The specific problem of the region is underdeveloped water and sewage treatment infrastructure. In 2001 only 55.7% of villages in the county were connected to public water supplies. Only 15.6% of villages were connected to sewage water collection. Based on the data summarized in Table 8, it is clear that the problem with access to public water supplies is not specific only to the Roma settlements. There are 790,321 people in the county, of which 199,139 (including 38,979 Roma) do not have access to a public water supply.

Table 8. Access to public water supply in the Prešov County

Number of districts		Number of villages				Number of inhabitants			
Total	With Roma settlement	Total	*Without public water supply*			Total	*Without public water supply*		
			Number	[%]	With Roma settlement		[Thousands]	[%]	Living in Roma settlement
			Total				Total		
13	*13*	*666*	*305*	*45.8*	*91*	*790,321*	*199,139*	*25.2*	*38,979*

Source: Adopted from data of the Office of the Plenipotentiary of the Slovak Government for Roma Communities.

However, when we go from this macro-picture into more detailed assessment of the situation in the villages and Roma settlements, we find significant differences in the conditions between the majority and minority populations. In the case of the three Roma settlements analyzed in this case study, there is a clear division between the village and the shantytown. All three villages have built municipal water supply systems, but Roma in the shantytowns are dependant on several wells or they even use water from the Svinka River for drinking and cooking. The situation is summarized in Table 9.

Table 9. Roma settlements Jarovnice, Hermanovce and Svinia and their access to the water

Name of the settlement	*Source of water in the settlement*	*Source of water in the village*	*Comments*
Jarovnice	Wells	Public water supply*	River used for washing
Hermanovce	2 wells	Public water supply*	River used for washing
Svinia	2 public wells	Public water supply*	Roma regularly drink water from the river

* Several non-Roma houses in the main village are not connected to the public water supply and they use water from wells.

Source: Field research results triangulated with data from the Office of the Plenipotentiary of the Slovak Government for Roma Communities, and 2001 census data

There are two wells serving as the source of the water for the whole community in Hermanovce. One is behind the road and the stream separating the shantytown from the village, and it provides water for a majority of the Roma. The second one is directly in the settlement. This one contains water of very poor quality since it collects surface water. The village itself has water from individual wells and from a newly (2002) drilled deep well, which was co-financed by NGOs and a local cooperative farm. The drilled well is connected to municipal water supply system already serving most of the inhabitants of the village with water of good quality. NGOs supported this project, since it should also provide a sufficient amount of water for the planned public houses for the Roma in the future.

Hermanovce village is without sewage system treatment and the Roma settlement is located downstream below the village. The village above the shantytown has 1,467 inhabitants. Moreover, there is a cooperative farm upstream with extensive agricultural activities, including stock breeding. This means that all the pollution from the houses, including detergents and biological waste, flows through the settlement, which is only a few meters from the stream.

According to social workers (interviewed in May 2004) in the summer of 2003, Roma children were suffering severe allergic reactions as the result of swimming and playing in the water. The awareness of their parents about the environmental problems and impacts of contaminated water is extremely low. The people I interviewed usually do not see any direct connection between the village, waste and disease if the water is visually clean. Most of the

houses in the village have individual sewage collectors which are supposed to be regularly cleaned at the expense of the households. The economic situation in the village, but also low social and environmental awareness of the inhabitants, leads to a situation where many of the households simply make a hole in the collector and leave the waste to flow into underground structures and eventually into the river.

Figure 17. Children in Jarovnice collect water from the Svinka River.

Source: Photo courtesy of Ben Eden

There are several dry toilets in the Roma settlement in Hermanovce which are built above the river stream and the waste goes directly into the water. Several meters downstream from the toilets I witnessed Roma children playing in the same water. It is the same practice in Jarovnice. Children and women are also those who collect water from the streams. See Figure 17. The problem is that the level of understanding the cause-effect relation of pollution and disease (e.g., allergies among the Romani children) is on a very low level, or doesn't exist at all. As one Roma mother puts it:

> They have always been playing here [a few meters down the stream from the shantytown, under the wooden toilets built on the bank of the river]. I used to play here when I was young, what's wrong with this? I don't have bread for them, that's wrong…It is good in summer, they can collect berries and mushrooms to eat" (Personal interview, Jarovnice, July 2004).

However, other Roma told me that they are aware of the poor water quality in the stream, but they have no alternative program for it. Moreover, the system of education and treatment of children is rather different in Roma families. Children are allowed big personal freedom and a high number of children in families supports a system where older children take care of the younger. Lack of education, an absence of awareness and inability to understand the cause-effect relation in pollution may contribute to a situation where the Roma are simply not fully able to understand the problem of water quality in the stream they use as the source of water and the relation between pollution and water-born disease. In Hermanovce, the village plans to build a water sewage treatment plant (together with the neighboring village of Bertotovce). As of 2006, this is still only a plan with no financial and or technical background. The village and the planned public housing for Roma should already be connected to this system.

The water supply in the village of Svinia is a more dramatic situation. There is no access to a public water supply in the shantytown and the Roma use two wells as the only source of water. If there is not enough water in the wells they take water directly from the Svinka River. The river is also used for washing. As one of the respondents described:

> "When it is dry, the well is not sufficient and we take water from the river. It is not good, but we need to drink and the wife cooks…The water is muddy sometimes but otherwise good…my wife also washes dishes there". (Personal interview with Roma inhabitant of Svinia in May 2004)

One of the wells is situated directly in the shantytown; the other is in the adjacent field collecting water flowing to the settlement via a gravity-driven pipe. The first well provides water that is visibly dirty and, according to chemical tests, polluted (information from personal interview with local social worker, August 2004). This well was the only source of drinking water for the community until 2003. The second source of water is a water pump

built on the outskirts of the settlement. Local NGOs paid for the third well, which was drilled in 2003. The two newer wells are reportedly of better quality.

There are two main problems with the water quality in these wells. Firstly, the ground is swampy and does not serve water of good quality. Secondly, the shantytown is surrounded by agricultural fields with intensive agricultural activities, including fertilizing the soil with chemical and biological fertilizers which end up in the surface and ground water. The same activities are going on in the upstream fields, contaminating water in the Svinka River. Large capacity cesspool sumps connected to the housing faced a number of problems also. These were built in such a way that their upper boundary was higher than the local terrain and they were constructed extremely unprofessionally. Thus, following heavy rains, the ground water and surface water flood the capacity of the sumps and they discharge their contents into a public area (Mušinka 2003).

Wells and simple sewage collection built with the help of development NGOs illustrate another side of the problem, which could be labeled the "tragedy of the commons" in the settlement. Since the well belongs to everybody, it means that it belongs to nobody, and the Roma themselves have often destroyed the wells and sewage channel by throwing garbage there. There is a sewage system and drainage for surface, rainwater and wastewater, but inhabitants do not know how to maintain it, and they regularly throw garbage into the channels (partly because there is no waste collection system in the settlement), which makes the system collapse.

The settlement depends on wells as the main source of water. This is the situation common also in the non-Romani part of the village. Yet there are individual wells accompanied by pumps and a municipal water system providing water of standard quality and amount. The Roma also regularly take water from the Svinka River. A Romani female, mother of five children describes:

> Q: How do you get water for cooking and washing?
> A: There is no running water. My kids bring water for washing from the river.
> Q: Do you use this water for cooking and do you drink this water?
> A: Yes, there are always lots of people for water from the well; it is sometimes faster from the river.

> Q: Do you think this water is good and healthy?
> A: After rain we don't take it, it is muddy, kids have often diarrhea, …we live here like animals.

The chemical content of the water is problematic in both cases: in the well and in the river. The main problem is non-point pollution from farming. In the case of the Svinka River this factor is amplified by the fact that several villages with no sewage treatment are located upstream. According to a local NGO activist:

> We took the water last year [2003] to the hygienic station in Prešov. The chemical content of water from the well was within the norm, but the biological was disastrous and the water was not recommended for drinking. In the case of water from the river it was both biologically and chemically far beyond the Slovak and European norms. It is water these people drink everyday…It is impossible, at least I think it is, to distinguish what the children are often sick from. It could be water, it could be food they eat, especially if it is from the landfill, it could be malnutrition. These Roma mothers are not all the same; some care, some don't.

The water from the stream and from the well is directly used for cooking and drinking. With the help of Slovak, Dutch and Canadian foundations, local NGOs built water pipes to support the local kindergarten with water for washing, and one shower was constructed for inhabitants of the shantytown. Nevertheless, this entire infrastructure uses water from the wells pumped into the showers. The pipelines get regularly frozen during the winter. One of the outcomes of this alarming hygienic situation is widespread hepatitis, especially among the children in Svinia. Parasites and intestinal infections are widely reported according to social workers and a local doctor.

Water quality in the Svinka River and wells is problematic in all three settlements. There are several reasons for this. The biggest source of pollution is agriculture. With the begining of the 1989 economic transformation, cooperative farms decreased their use of industrial fertilizers, partly because they decreased production, partly because the price of this chemical was not subsidied any longer. However, with the new economic conditions and growth in agricultural subsidies (in relation to the EU accession) the trend is again to increase their use.

There is also an increasing amount of village sewage and nitrate discharges. In the case of householders' waste, economic straits influence the ability of many people in the villages to pay for septic tank maintenance and transport of this waste to the landfills. The non-Roma upstream do not have to pay for the transport of sewage. The Roma settlements downstream suffer from poor water quality. Since most of the Roma do not posses official residence permits they do not pay for garbage collection. The municipality provides two containers for the shantytown and they started irregularly collecting the waste from them. Waste and garbage are often thrown into the sewage channel and spread all around the settlement since the capacity of the containers is limited.

6.3.2. Exposure to floods in Roma settlements

Floods represent a gradually increasing danger in this region. Understanding floods and their impact on Roma settlements requires understanding why floods are becoming more frequent and their impacts more significant in Slovakia. The excuse of the hundred-year flood is hardly relevant anymore, because since 1998, when 42 people died in Jarovnice, problems with the so-called hundred-year floods have been repeating in a faster cycle, year after year[112]. The two most sound explanations for this are mismanagement of the water catchment areas and climate change.

All three settlements were regularly flooded in the past. In Hermanovce the Roma shantytown is situated in the lower part of the valley, downstream from the village. It is an area known for floods long before the Roma settlement was allowed there. The village partly paved and deepened the riverbed in order to protect the village. None of these preventive measures were taken in the Romani part of the village.

In the floods of 1998 the whole settlement was approximately 1 meter under water. The situation has been repeated several times since then, although the level of the water was lower or the river "just" flowed through the shantytown, leaving mud and dirt in front of the houses. There have been no fatal accidents so far.

The most dramatic impact of floods was in the late 1990s in Jarovnice. Storms and rains on June 20, 1998, brought about one of the worst floods in Slovak history. The small and peacefull Svika River turned into a wild force. When the river approaches Jarovnice, it turns in a flat arch towards the left and enters first the shantytown of Jarovnice's Roma in the valley. In 1998 the river was already partly regulated upstream and the water flushed through Renčíšov and Uzovské Pekľany (villages upstream). The first area catching the wave was the shantytown in Jarovnice.

The estimated total number of people affected by the flood was 10,850 in 75 villages. In the flooding, approximately 25 homes of non-Roma and 140 homes of Roma were affected. About 35 Romani homes were destroyed in Jarovnice. Most severely affected were the 47 people who died. As many as 45 of these victims were Roma, of which 42 were from the shantytown in Jarovnice. There were only Roma victims of the flood in the village and the toll of this disaster could easily have been much higher:

> There was only one lucky moment in this disaster – the flood came in the early afternoon, when most of the Roma were on the streets and awake. If it had come in the middle of night when most of them slept, then causalities would be hundreds if not a thousand lives (Personal interview with a former forest manager in charge of the area in 1998. January 2005).

The Romani shantytown settlement in Jarovnice is situated in the valley of the Svinka River. Non-Roma live in houses on the slopes above the valley, which protect them from being as tragically affected by the floods as the Roma in the low-lying area. The Roma were reluctant to return to the river valley, where the water had destroyed their dwellings. However, as the mayor of the village pointed out after the floods in 1998, the Slovaks in Jarovnice did not want the Roma in close proximity, and so there was nowhere to begin building new dwellings for the Roma left without shelter. "We found a location that would be feasible for the construction of new dwellings, but the land belongs to private persons. It's their decision, whether construction starts or not", said the mayor of Jarovnice in an interview with the Slovak daily *Pravda*[113].

[112] Hundred-year floods, or thousand-year floods are terms used by watershed managers in order to describe exceptional water levels in rivers. They assume that such high water levels do not occur more often than once in a hundred years (or once in a thousand years, respectively).
[113] *Pravda* daily, „Názory" [Opinions] June 30, 1998.

In 2005 it was visible that the momentum created by the disaster had been lost and Roma are staying in the same place as before the flood. As a precautionary measure, the riverbed was deepened and paved as protection. Perceptions of the majority population as to why they (Roma) live in this endangered zone vary between a lack of understanding of the possibility for Roma to choose their place of settlement to open neglect and racism:

> This place [Roma shantytown] is of no good land. I think it always belonged to the municipality; it was wetland, mosquitoes… my grandfather use to go there to wash horses… I don't know why they [Roma] live there (Personal interview, May 2004, Jarovnice resident).

> I would build a fence all around this place; they [Roma] are lost people, you know. It is a waste of time and money to do anything for them. But this place is good enough for them (Personal interview, August 2004, Jarovnice resident).

The reason for building homes made of wooden boards and stones in the valley are economic. As one young Roma points out: "They [the majority] don't want us here. Where should I go? I have no money. I build my house there [the shantytown] because where else? Our people live there…I can not go and build it elsewhere, the gadjos would throw me out[114]". The central government (pressed by the flood impact on the public opinion) invested into the village infrastructure development, but Roma families still live in the endangered (flood) zone. The 47 dead people shocked public opinion and government was forced to show some action. However, the houses for the first 20 families from the shantytown were not constructed sooner than in the begining of 2006, and the vast majority of the people still wait for their chance. The social situation of the Roma (as in 2006) remains the same, with the exception that the river is now regulated and the riverbed is deeper, which means that the Roma should be better protected against floods. There is minimal effort from the side of the municipality or government to address the situation in the settlement:

> There is only one street worker in the whole community, which is an extremely low number for a community of this size. There was a church mission center built in Jarovnice, but the local priest was, by the decision of the church, moved to the city of Michalovce and the activities are dying out. It is an example of how this

[114] Gadjo (plural Gadjove) is the Roma term for the "whites". In local slang among the "whites" it means farmer or redneck.

> type of work relies on several enthusiastic individuals and is not systematically developed with the support of the government. The role of the state here is substituted by NGOs (Personal interview, local NGO activist).

Many of the Roma houses were built illegally, although taxes on them are paid to the municipality and the Roma mostly possess residence permits. The place where the Romani settlement stands has been known as a flood zone for decades. Channels for sewage water were built after 1998, but as one of the settlement's inhabitants points out: "What are these channels good for if we don't have running water?[115]"

Regular floods are also a reality in Svinia, although they did not have as bad impacts as in the case of Jarovnice. Disastrous floods in 1998 claimed one victim in Svinia. Since then the Roma regularly evacuate their houses and huts during storms and look for safe places in the nearby village or forests. The first reaction of humanitarian organizations and the Slovak government after the 1998 flood was to provide shelter for people who had lost their houses. Portable cabins or *unimobunkas* were bought (40 in the case of Svinia) as a temporary solution before new houses can be constructed[116]. In 2006 the *unimobukas* still serve as permanent residences for whole families. Many people live on the riverbank in huts that are made of wood and mud. When it rains, the mud floor changes into a swamp. A Romani female who moved, in 2002 from a hut into a flat recollects:

> Q: How did you live in huts?
> A: Every time it rained I found myself in water up to my knees. Then my husband's family moved out and we were lucky to move here [to one of the flats in the shantytown]. It is much better here…

The extent of floods was decreased in the beginning of 2000s by regulating the river and introducing protective measures (e.g., riverbed deepening, concrete walls). Flood intensity decreased, but part of the settlement is still regularly under water. The settlement is surrounded by forests and located on the bank of the river, which limits the space available for the construction of houses and huts to the place near the river. Flood management is addressed

[115] *Pravda* daily, "Povodeň v Jarovniciach: Päť rokov po tragedii" [The flood in Jarovnice: five years after the tragedy]. July 21, 2003.

with "end-of-the-pipe" mentality. Instead of addressing the problem at its roots, municipalities and the government started to pave water streams with concrete and deepening the river beds in order to prevent floods in the villages. As a result, they have created a "toboggan" system where the water flows faster in the upper stream and floods the villages downstream. As an interviewed NGO activist points out (in exaggeration): "It will ultimately require chanelling the river throughout the way to the sea to prevent floods with this approach".

6.4. THE ENVIRONMENT AS AN OPPORTUNITY – ROMA COPING STRATEGIES

The social situation in the three settlements further deteriorated after the cuts in social assistance introduced in the begining of 2004. As a result, people search more for alternative sources of income or food. Besides illegal harvesting of agricultural products from fields and gardens in the villages and surrounding area, there is the most drastic form of this – landfill "shopping[117]". According to the social workers working with the communities, this activity did not take place before the assistance cuts. It represents a further decline in the self-dignity of the Roma in the settlement:

> This [landfill shopping] was a very uncommon practice here. Only those on the very bottom of the community were doing this before and they were ostracized. Times have changed and it is becoming "normal". A couple of weeks ago I threw a box of milk into our trash bin outside because it was evidently spoiled. A few hours later I saw a Roma woman carrying this box and feeding her baby with it. I was deeply emotionally touched – almost crying when I saw this, I was knocked out for a while (personal interview, May 2004).

[116] A Unimobunka is a wooden box or portable cabin (caravan or trailer) often used by construction workers as temporary accommodation and later transported to a new construction site. Usually they are around 5 meters long, 4 meters wide and 2.5 meters high.
[117] "Landfill shopping" was the term used by several local residents to descrive gathering usable waste or goods from landfills.

Since the local landfill, due to the overall economic situation in the village, does not provide much opportunity to find food or things to sell, the main target of the local Roma has become landfill in Svinia, where supermarkets from the city of Prešov dump their waste. At the beginning of 2004 a private company and the municipality constructed a landfill approximately 300 meters upstream from the settlement. The landfill serves for several super and hypermarkets from the city of Prešov. Roma closely watch the landfill and monitor trucks from Prešov, which bring mostly packaging and biological waste from the shops. It is food past the sell-by date, rotten vegetables and spoiled dairy products.

There is very limited protection of the site. In August 2004 there was only one guard on duty and a 2-meter high fence. This did not prevent Roma from entering the place and searching the waste for any goods or food they could sell or consume.

Besides food, they often find products they can sell or use for their houses. In May of 2004 I saw damaged glass and window frames they had found on the landfill and used for their huts and houses. The landfill became a target also for Roma from Jarovnice, Hermanovce, Chminianske Jakubovany and other surrounding Roma settlements. However, since they do not live directly on the spot, they are less successful than Roma from Svinia, who know when the trucks are arriving. The landfill is a "time bomb" and potential source of epidemics for all the surrounding Roma settlements.

One of the most profitable activities is metal collection. Roma search the landfill from Monday until Friday (there are no trucks on the weekend). Selling aluminum, copper or brass to nearby scrap metal shops provides additional income. The daily earning is in the range of SKK 50 – 100 on bad days and as much as SKK 1,000 or more on really good ones[118]. Activation benefits introduced by the Ministry of Social Affairs and the Family in 2004 (participants are required to work for the municipality or a non-profit organization four hours a day) is SKK 1,500 a month. The mayor of Svinia, in cooperation with local NGOs, has considered an idea to build a recycling factory in the village, but this idea so far remains only on a theoretical level.

[118] SKK 40 is approximately EUR 1.

The surrounding environment provides several opportunities for improving the living standards of the deprived Roma community. The most common activity in the summer time is collecting mushrooms and berries, which are partly used for direct consumption and partly for trade. The road from Prešov to Poprad is part of the main transport corridor for cargo and tourists between the eastern and western parts of the country. A common picture in summers is Roma standing on both sides of the road offering mushrooms and berries to the cars' passengers.

Illegal logging and wood collection is a common activity throughout the year, with the peak in the winter heating season. Wood (cut or gathered illegally) from the nearby forests is needed for cooking and heating in the shantytowns. Conflicts with forest managers are very common, and there have been several court trials already. Another widespread activity is illegal harvesting on state and private agricultural lands. It reportedly ended in direct physical conflict and fights between (especially) small farmers or gardens owners and the local Roma.

Collection of paper and metals is one of the alternative coping strategies of Roma. The relatively small distance to Prešov allows this trade, since firms in the city buy these materials. Roma systematically search the surrounding area, especially abandoned premises and bankrupt firms (e.g., old premises of cooperative farms). These activities are often on the edge of legality (unclear property rights) or they directly violate the law and create conflicts (e.g., in Svinia, Roma allegedly took and sold metal lids from public sewage channels on the streets).

6.5. SOCIAL PROCESSES IN THE VILLAGE

6.5.1. History matters

The three settlements differ in size, number of inhabitants and in the shape and quality of houses. What they do have in common is segregation from the village, differentiated access to environmental benefits and virtually no access to the decision making affecting their lives. The arrival of Roma in the region is very unclear. It seems that settlements in Hermanovce,

Jarovnice and Svinia were built mostly after the Second World War, in the 1940s and 1950s, although there are hints that Roma families may have lived there also prior to the war.

Several possible explanations arise for their selection of the region for settlement. It could have been some personal affiliation to this place. Some of the Roma may have lived there prior to the war. The case of Hermanovce suggests that the people were looking for abandoned houses without owners. It is also possible that Roma were not welcome in the cities and the countryside provided asylum for them. The Roma were probably not welcome, but they were not prohibited from settling down. However, two factors played a crucial role in the selection of places to live. Institutional discrimination and property rights combined with the commercial value of the land. As Anna Husarova from Jarovnice points out:

> [After the war] survivors had to settle next to forests, in the middle of fields or on riverbanks. These were the only places where they were allowed to settle down and start over. They built huts and began to call them flats. No attention was paid to them, and they were given no help[119].

Commercial interests of the land owners were combined with the intention to get Roma out of the village and out of sight. Official governmental policies, such as the already mentioned 1945 amendment to the directive on *Governing Certain conditions of Gypsies*, set up a framework for this unfair treatment. In the case of Hermanovce and Jarovnice Roma shantytowns were built directly on swampland. It was so in Svinia as well, where later Roma from the village center were also moved into the present location. Land in the present Roma settlements does not qualify for settlement due to swamps and regular flooding. Houses are built outside of the villages – apparently on the cheapest land.

6.5.2. Distribution of entitlements

Roma are latecomers to the villages. What is even worse, they are poor latecomers of a different ethnic origin. It was mostly after 1948, when non-Roma from the villages received

[119] Testimony from the "Stories exchange project". Available at www.stories-exchange.org/sep/english/stories/story.cfm?SID=118&CID=1 [Consulted 22 January 2004].

extensive rights and entitlements over natural resources. Nationalized properties were managed by municipalities and local cooperative farms. However, even in the proclaimed classless society of state socialism people from Roma shantytowns were excluded from decision making and marginalized. Virtually no entitlement over natural recourses formed part of the social situation of the Roma. Landscape management implemented by non-Roma has had direct impact on Roma shantytowns.

Entitlement over natural resources plays a significant role in landscape management and water distribution. Its absence on the side of Roma meant and means that a large part of the people in villages do not have a word in management of the natural resources and they are omitted when it comes to the distribution of positive environmental benefits (i.e., access to clean and risk-free water).

6.5.3. Social and economic transformation and people in shantytowns

The beginning of the 1990s meant, in all three villages, significant deterioration of the social situation. Roma, mostly employed on cooperative farms and in companies in Prešov, were among the first who lost employment. In a few years unemployment reached 100% in the shantytowns. Another factor playing a significant role in the social situation of the Roma is the size of families and number of children. This demographic trend may be illustrated by the fact that in the school year 2003-2004, there were 316 students in the local schools in Svinia, 216 of whom were Roma.

The population growth in Roma parts of villages has had another impact besides poverty. Non-Roma started to feel further endangered by the rapidly growing Roma population and have tried to segregate them. The segregation already goes from cradle to grave. A teacher from Svinia said:

> We made a mixed class with Roma and whites and the very next day parents of the white kids said that they would take out their children of our school and put them in Prešov. So we separated them again (personal interview, May 2004).

Segregated schools, segregated houses, segregated places in local pubs, segregated graves at local cemeteries — the tendency to be separate from the Roma is very strong, and in the cases of Hermanovce and Svinia it has a practical impact on the Roma housing projects. Most of the non-Roma inhabitants of the villages would prefer to see new settlement even further out of the village than the present ones are. Yet this collides with the interests of the surrounding villages, since the high density of settlements in the region makes it impossible to find a place remote from all villages equally. The tendency is to use government- and NGO-backed plans for construction of public houses as the leverage for further segregation of Roma. A middle-aged non-Roma inhabitant of Svinia said:

> We do not want them here. If the government and the EU are so stupid they are going to build them houses, then only somewhere far away. They outnumber us, look at how many kids they have; we will be a minority here soon. This used to be a nice village, now all the young people are leaving, there is no future here (personal interview, May 2004).

There is no law in Slovakia stating that the public housing must assist in integration. This factor, the open animosity of the non-Roma public, and the resulting unfriendly attitudes of local municipalities (possessing extensive rights due the decentralization process) mean that the EU and other foreign assistance, together with governmental funds, may support projects enhancing segregation.

6.5.4 The people and their political organization

Although more than one fourth of the people in Hermanovce are Roma (27.4%) and in the other two villages Roma are already in the majority (Roma in Jarovnice represent 74% of inhabitants, and in Svinia they is 51.5%), there is no single Roma member of a local council in any of these villages. Roma do not hold any job in either the public administration or in the private sector. This indicates that the Roma communities are extremely fragmented and missing strong leadership. In none of the three villages did I find a respected leader, or at least a spokesperson, able to formulate the interests of the Roma community as such. There are people with some authority within their own clan and potentially among affiliated families,

but they neither represent the majority of Roma nor can they gain sufficient support to penetrate the local council.

However, the Roma will gradually have more eligible voters as the new generations reach the eligible age for participation in elections. Non-Roma are aware of this threat and they see construction of new public houses as a means to escape the potential situation of being subordinated to a Roma council and/or mayor. Such a development would also inevitably change the distribution of entitlements among the inhabitants.

6.6. THE REGION AS A CASE OF ENVIRONMENTAL INJUSTICE

The Roma settlements in Svinia, Hermanovce, and Jarovnice are located in places with the worst environmental conditions in the villages' territories. In all three cases non-Roma inhabitants occupy healthier and safer places. There are three main areas where we find differentiated access to environmental benefits or unequal exposure to environmental threats:

- Floods – There is permanent danger of floods in the Hermanovce settlement. In the case of Svinia and Jarovnice the threat of floods was addressed only after the disastrous flood of 1998 and the heavy casualties (almost exclusively among the Roma population).
- Limited access to drinking water and sanitation – Water-borne diseases resulting from appallingly unhygienic conditions (especially in the Svinia and Hermanovce settlements) result to a significant extent from a discriminatory pattern of access to running and drinking water in these settlements. As a result, the Svinka River is used for washing and even drinking, despite contamination by agricultural activities.
- Landfill raids -- Construction of the supermarkets' landfill in close proximity to the Roma settlements, weak protection of the landfill, and the bad social situation of the local Roma urge these people to go "landfill shopping" as an alternative means of income.

The Roma shantytowns in Hermanovce, Jarovnice, and Svinia represent examples of how exclusion from society, missing entitlements, and the weak social position of the affected

people allows discrimination and unequal distribution of environmental benefits and harm. The case studies also illustrate the extremely important role of the relationship between the Roma and non-Roma on the local level. Conflicts over the building of new public housing and discriminatory treatment of the Roma in decision making shows how difficult it is to address different forms of environmental injustice even in the cases where there are resources available.

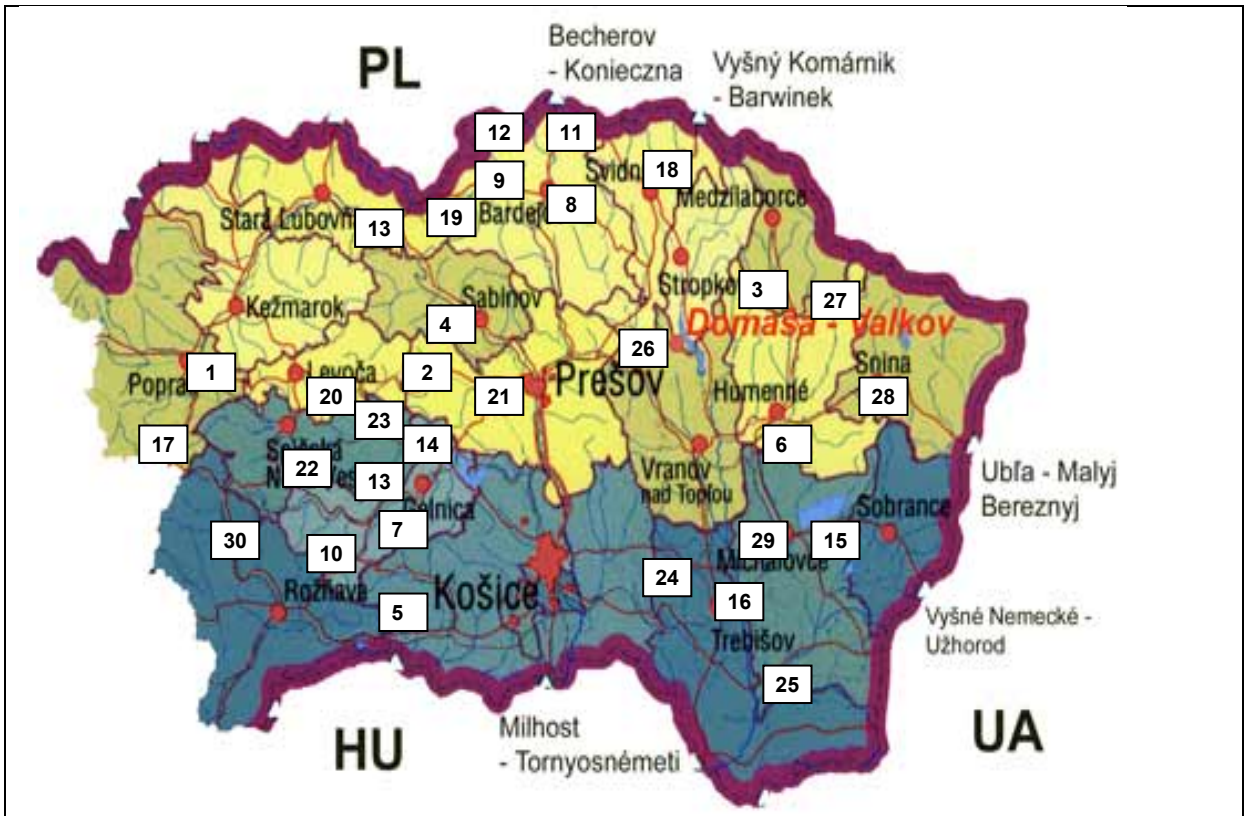
CHAPTER 7 – A REGIONAL SNAPSHOT OVERVIEW OF THE ENVIRONMENTAL SITUATION OF ROMA IN 30 RANDOMLY SELECTED SETTLEMENTS

7.1. SETTINGS OF THE RAPID RURAL APPRAISAL

Findings and outcomes of the two case studies described in the previous part of this dissertation represent the very specific situation of the Roma communities in the Rudňany and upper Svinka River Watershed region. However, I was also interested in determining whether these two case studies are representative of a broader pattern of environmental discrimination and unequal treatment or whether they represent a specific situation and extreme pattern that deviates from (otherwise) equal environmental conditions of the Roma minority in Slovakia.

To address these questions, regional research was designed to provide a snapshot overview of the situation of Roma settlements in the eastern part of the Slovak Republic. The main goal was to monitor the situation in 30 randomly selected Roma settlements and provide context, additional input and feedback for the parallel in-depth case study research. See Figure18 for an illustration and Table 10 for basic descriptions of the settlements included in the sample.

Figure 18. Geographical distribution of the 30 Roma settlements included in the regional research



RRA settlements: 1. Jánovce; 2. Spišské Vlachy – Dobra Vôľa; 3. Zbudske Dlhé; 4. Uzovske Pekľany; 5. Dvorníky - Včeláre; 6. Humenne –Podskalka; 7. Helcmanovce; 8. Bardejov-Dlhá lúka; 9. Rokytov; 10.Mníšek nad Hnilcom; 11. Zborov; 12. Petrova; 13. Lenártov; 14. Krompachy; 15. Hažín; 16.Trebišov; 17. Spišské Bystré; 18. Medzilaborce – Palota; 19. Nižný Tvarožec; 20. Spišský Hrhov; 21. Chimianske Jakubovany; 22. Makrušovce; 23. Bystrany; 24. Sečovce; 25. Markovce; 26. Bystré; 27. Nižná Jablonka; 28. Snina; 29. Trhovište; 30. Nižná Slaná.

The other aims of the regional research were to identify any other potential forms of unequal treatment and discrimination, as well as to provide additional data for a better understanding of the relations between ethnic origin, the social situation and the environment.

Selection procedures for the Roma settlement sampling are described in the methodology chapter. The regional research was conducted using the rapid rural appraisal (RRA) methodology. RRA methodology, discussed in detail in the chapter on field methodologies, builds on qualitative research techniques. The Roma settlements and their basic characteristics are summarized in Table 10. In the course of the research I also visited several other Roma shantytowns which were not included in this sample. Usually these were additional settlements in close proximity to the research sample places or I considered them interesting from the standpoint of clarifying certain aspects of the research. This was the case of

Letanovce, where latent conflict between the Slovak Paradise National Park and local Roma communities helped me to understand Roma coping strategies and Roma urban communities in Prešov and Košice, where I focused on the contrast between the living conditions of people in rural shantytowns and those living in relatively prosperous cities.

Table 10. Basic characteristics of Roma settlement in rapid rural appraisal

Name of the settlement	Number of houses*	Number of Roma inhabitants	Total number of inhabitants	Proximity to the village (in kilometers)	Comments
1. Jánovce**	53	509	1,114	0.2	
2. Spišské Vlachy – Dobra Vôľa	20	NA		0.2	Part of the Roma community lives in new public housing
3. Zbudske Dlhé	24	326	555	0.4	
4. Uzovske Pekľany	10	91	382	0.3	
5. Dvorníky– Včeláre	12	74	442	0	
6. Humenne– Podskalka	70	1100	36,000	0	Shantytown at the outskirt of the city
7. Helcmanovce	35	342	1,556	0.2	
8. Bardejov-Dlhá lúka	10	115	33,200	0	
9. Rokytov	10	130	533	0.2	
10. Mníšek nad Hnilcom	19	400	1,691	0.1	
11. Zborov	101	953	2,707	0.2	
12. Petrova	13	160		0.3	
13. Lenártov	32	435	941	1.1	
14. Krompachy***	3 blocks of apartments and 20 houses	2,000	8,812	0	Settlement in proximity to factory
15. Hažín	27	27	446	0.2	
16. Trebišov***	9 blocks of apartments and 2 streets with houses and huts	4,500 – 5,000	21,260	0	Urban ghetto
17. Spišské Bystré	20	185	2,322	1	
18. Medzilaborce – Palota	7	72	183	0	
19. Nižný Tvarožec	16	122	454	0.1	
20. Spišský Hrhov	28	200	963	0	
21. Chimianske Jakubovany	165	1,092	1,472	0.3	
22. Makrušovce	60	1,350	3,243	0	
23. Bystrany	34	1,700	2,600	0.2	Municipal council is entirely Romani (as of August 2004)
24. Sečovce***	5 blocks of apartments, several huts	1,014	7,792	0.5	
25. Markovce	15	200	702	0	
26. Bystré	34	400	2,637	0.4	
27. Nižná Jablonka	10	70	172	0.15	
28. Snina***	6 blocks of apartments	1,000	21,325		

29. Trhovište	20	293	1,703	0.2	
30. Nižná Slaná	30	250	1,168	0.5	

* In many cases, the researcher has to decide what constitutes a house. Often new dwellings take the form of a simple hut, or rooms are added to an already constructed house. Moreover, housing construction and deconstruction are dynamic processes depending on fluctuating numbers of inhabitants.

** In small municipalities "everybody knows everybody" and numbers set forth by the mayor or local council are therefore more realistic than census data and I use them here.

*** In the case of towns it is very difficult to estimate the size of the Roma population and the number of dwellings. Census data are not very accurate (see chapter 1 above). I rely on data from municipalities but their estimations may not be very reliable.

Source: Field research results triangulated with data from the Office of the Plenipotentiary of the Slovak Government for Roma Communities, and 2001 census data and Slovak Statistical Bureau figures.

The 30 Roma settlements analyzed in the course of the research constitute a very diverse sample of shantytowns, urban ghettoes, and relatively well-off Roma streets in villages. The smallest communities consist of around 10 houses and less than 100 inhabitants, while the biggest Roma settlements form urban ghettoes are on the periphery of Trebišov and Sečovce. The only community where I found non-Romani inhabitants occupying houses in the predominantly Roma ghetto was Krompachy. The class dimension of environmental discrimination is visible in this case, since a non-Romani inhabitant of the settlement is also among the poorest people in this small city.

With this one exception, the dividing line between the Roma settlement and non-Romani inhabitants was always clear and in most of the cases Roma settlements were separated from the main village either by distance or a physical barrier (e.g., forest, railway or stream).

The usual amount of time I spent in the individual settlements was no longer then one day and varied between three and 10 hours. The methodological approach was based on the field situation and adapted to the particular resources. In line with the RRA methodology I relied on local "key informants" where possible. Most of these informants were mayors or members of local councils or NGOs working with the community and Roma in the settlements. I was looking for particular variations in environmental conditions in the settlement and the main village.

The focus was on different forms of unequal treatment when it comes to the distribution of the environmental benefits and harm. Triangulation was done by collecting data from more than one source and then cross-checking it for consistencies and discrepancies. My usual rule was to interview opposite sides of the spectrum of stakeholders (for instance, to obtain and cross-check data from the mayor with data obtained from local Roma or NGO activists). All the data gathered throughout the field research were again cross-checked against data from official statistics, databases, governmental documents, independent studies, and newspapers.

7.2. THE RRA FIELD RESEARCH

In the course of the research I focused my attention on the following three aspects of environmental conditions in Roma shantytowns: (i) housing and exposure to toxic and other waste; (ii) access to water and sanitation; and (iii) the risk of flooding in the settlements. The first two aspects were identified in the preparatory stages of the field research, while the last one (flood risks for the Roma shantytowns) resulted partly from the field research for case study 2 in the villages of Jarovnice and Hermanovce, and partly from interviews and studies for the RRA. The danger of floods was perceived as an eminent threat by many Roma.

7.2.1. Housing and exposure to toxic and other waste

One of the purposes of the regional research was to put the situation of the case study settlements into the context of the broader sample of Roma living environments. In addition to the case of Rudňany, I found comparable examples of a direct link between industrial production and unequal exposure to the emissions in the Roma settlement in Krompachy. This settlement is home also for non-Romani people. However, the non-Roma families occupy only several flats on the edge of the space. Most of the people there are impoverished former workers from the nearby factory.

The settlement is located at the foot of a hill, behind a smelting factory and under its chimneys. The locality is spatially segregated from the town by a road and stream. Four

blocks of apartments were originally built there for workers in the factory. The factory's need for an unskilled workforce attracted Roma from surrounding areas and soon they formed a Roma settlement surrounding the blocks of apartments. Non-Romani inhabitants of the apartments gradually left the place with the exception of several families. Due to the relatively good salaries in the factory and social benefits of the former regime (e.g., subsidies or low-rate loans), Roma built brick houses and the settlement does not consist of the huts or makeshift shelters typical of other (mostly rural) Roma colonies.

Krompachy is the only producer of electrolytic copper in Slovakia, which has been processed in the town since 1937. Since the sources of cuprum are polymetal ores from the surrounding mines, high levels of toxic emissions result from the production process. The factory partly processes cuprum from waste metal collection.

The town is one of the most ecologically problematic regions in Slovakia. According to data from the Slovak Academy of Sciences (Koči *et al.* 1994), the main sources of toxic emissions are smelting processes for producing polymetal wires and the production of sulphuric acid. For examples of annual emission levels, see Table 11. Measurements by the Slovak Academy of Sciences (Koči et al 1994) of the contamination indicates that the area of Kovohuty Krompachy Company and the surrounding areas are highly polluted by arsenic and lead. Other elements found in high concentrations are zinc and copper. Approximately 18,000 ha of agricultural land in the area is contaminated by copper in concentrations of 50 $mg.kg^{-1}$. Table 11 illustrates the scope of the pollution.

Table 11. Annual air emissions from copper smelting in Krompachy for 1993

Particles: 171.41 t	Cu: 54.08 t
SO_2: 9,983.38 t	Zn: 43.04 t
NOx: 87.14 t	Pb: 21.25 t
CO: 1,418.2 t	Sn: 6.81 t
As: 39.86 t	

Source: Koči *et al.* 1994

Emissions from the factory have had a strong impact on soil contamination, and the hill above the settlement has been affected by the air emissions. No site-specific data on contamination levels exist. However, interview and observational data indicate that the level of contamination is higher in the settlement than in the other parts of the town. There is still heavily damaged vegetation on the slope (and in the settlement) and dust and rain bring the chemicals from the slope down the hill to the settlement.

There were two factors influencing the situation of the people in the settlement. At the beginning of the 1990s, the factory went through a long and complicated process of production transformation, restructuring, and privatization. Downsizing heavily impacted people in the settlement and unemployment is rampant. On the other hand, the decrease in production amplified by new, more stringent environmental legislation decreased the level of emissions from the factory. Nevertheless, accumulation of heavy metals and other contaminants in the soil from previous decades is a persistent problem. As one of the inhabitants pointed out:

> It is much better nowadays. It [the slope above the settlement] used to be like moon country, no grass, nothing. The chimney was smoking all day long. It quit a couple of years ago. But also our jobs are gone.

The story of the settlement is similar to that in Rudňany. The Roma (and other employees of the factory) were satisfied that they received jobs and that the factory provided them with a stable income. Factories were hiring many unskilled or low qualified workers. Roma were attracted to move into the industrial towns and villages and settle down in areas close to mines and factories. They were not welcomed by other non-Roma and from the very beginning were gradually pushed to the outskirts of the villages.

Since the link between pollution, environment, and health was not the center of attention in the era of the centrally planned economy, the factory and the state built the first block of apartments directly under the chimneys of the factory. The present settlement is home to around 400 people, who are more aware of the adverse environmental characteristics of the place than previously, but do not have the money or/and qualifications to resettle.

The case of the Roma in Trebišov provides an example of another form of environmental impacts on a disadvantaged community. A slaughterhouse and meat-processing factory are located in the Roma neighborhood in the town. The factory is a source of bad odors and solid waste. This solid waste is stored in open containers behind the factory fence and is regularly targeted by Roma looking for food. The meat decays quickly, especially in the summer time, and constitutes a threat to the people consuming it. Besides the bad smell of the rotten meat, the containers are a source of food for rats and insects. The company management has introduced no protective measures (for instance, repairing the fence or providing closed containers).

The pattern of environmental injustice present in Rudňany, Krompachy, and Trebišov was not confirmed in the other Roma settlements covered in the regional research. However, the sample did not include other industrial hubs of the region. For example, towns with extensive chemical, food processing, and other industries (e.g., Strážské, or Košice) and areas of mining in the south (e.g., Rožňava, Revúca) were not included in the random sample.

A more widespread form of unequal environmental conditions is household waste management. The parts of villages where Roma settlements are located are often considered by municipalities as the areas most appropriate for construction of landfills (e.g., Hermanovce, or the newly built landfill in Svinia). In the case of the Rudňany municipality, people regularly dispose of household waste in an illegal landfill located 300 meters below the Pätoracké Roma shantytown.

The crucial problem in this respect is that often the shantytowns themselves do not have systems of waste collection and management. Household waste is practically everywhere around houses in Sečovce. Residents (especially after the 2004 social assistance cuts) can not afford to pay for waste collection. New legislation on waste collection, waste disposal fees, and recycling has further increased the cost for waste collection and management[120]. On the other hand, this new regulatory framework may also provide opportunities for new jobs in waste separation, especially for people with limited skills and education.

[120] Partly as an outcome of the EU accession process, new Slovak legislation on waste, waste collection, cataloging and recycling (Act 223/2001 of the National Council of the Slovak Republic) has introduced very

7.2.2. Access to water and sanitation

Access to water and sanitation is the area where there is a clear discriminatory pattern of unequal treatment. On the micro-level of communities, in only 10 cases of Roma settlements out of the sample of 30 villages did I consider the situation with respect to access to water as equal (See Table 12). The usual situation is that all of the infrastructure (e.g., roads, pipelines) connects to lines in the non-Romani community and Roma are not connected to the pipelines or networks. This situation is due to multiple factors. Roma houses are often illegally built, they have grown significantly in number only in the last decades (after the construction of the pipelines in some cases) or Roma were not able to co-finance their construction.

Sometimes the municipality addressed the problem through the construction of an additional pipeline with one or two taps for communities of several hundred people (e.g., Hažín or Bystrany) or by drilling one or more wells in the settlement. In extreme cases, left on their own, there is practically no safe source of water.

In Spišské Bystré, the shantytown is located some two km out of the village on the slopes of the forest, segregated from the main village and behind the cooperative farm. There is limited access to the water from the well at the cooperative farm. The inhabitants regularly (especially in the summer time) suffer from a lack of water. They usually go to the cooperative farm to ask for water and then carry it back to the settlement. This is work usually done by women and children. They often take water from streams in the forest, which is of doubtful quality, especially after the rains when the streams contain mud and the water is yellow or brown. As one Romani woman described:

> "We take water from the streams. It is yellow and muddy after the rains usually. I use this water for cooking and drinking. There was no problem so far. Sometimes I ask for water from the farm [cooperative] and sometimes from "gadjos" in the village. But they pay for the water, they don't give it to anybody. It is good for cooking, but we have no water for washing. It is difficult in winter" (Romani woman, July 21, 2004).

progressive measures for encouraging recycling and waste minimization. However, these measures require investment, especially on the part of municipalities and individual households.

Using water from local surface streams is a common practice in the settlements. This is an extremely dangerous activity given that the Roma shantytowns are mostly located downstream from the main villages and that most of the villages have no sewage treatment plant. In settlements like Chminianske Jakubovany or Svinia, Roma use water contaminated by household sewage and intensive agricultural activities upstream.

The main sources of water in the 20 settlements appraised are wells. The number of wells in a settlement depends on the overall social and economic situation in the individual settlement. The general pattern is that the poorer and more isolated the community, the smaller the number of wells. The level of poverty usually reflects complicated social and economic development histories of the people in the settlement.

In a few extreme cases one well serves as the only source of water for a whole Roma shantytown (in Nižný Tvarožec for 122 people and in the case of Markušovce for 1,350 people). There is no treatment of the water prior to use and water quality depends on the overall level of pollution in the area, as well as on the location of the well. Table 12 summarizes results of the appraisal of water sources.

Table 12. Appraised Roma settlements and their water sources

Name of the settlement	Source of water in the village	Source of water in the settlement	Comments
Jánovce	Public water supply	2 public wells	Unequal access
Spišské Vlachy – Dobra Vôľa	Public water supply	Public water supply	Equal conditions
Zbudske Dlhé	Individual wells	2 public wells	Unequal access
Uzovske Pekľany	Individual wells	2 public wells	Unequal access
Dvorníky-Včeláre	Public water supply	3 public wells	Unequal access
Humenne-Podskalka	Public water supply	Public water supply	Equal conditions
Helcmanovce	Individual wells	5 public wells	Unequal access
Bardejov-Dlhá lúka	Public water supply	Public water supply	Equal conditions
Rokytov	Public water supply	Public water supply	Equal conditions
Mníšek nad Hnilcom	Public water supply	3 public wells	Unequal access
Zborov	Public water supply	7 public wells	Unequal access
Petrova	Public water supply	Public water supply	Equal conditions
Lenártov	Public water supply	3 public wells	Unequal access
Krompachy	Public water supply	Public water supply	Equal conditions
Hažín	Individual wells	No water supply	Use of surface water
Trebišov	Public water supply	Public water supply	Equal conditions
Spišské Bystré	Public water supply	No water supply/surface water	The stream above the settlement contains high levels of Fe and Mn. Unequal access
Medzilaborce-Palota	Public water supply	Public wells	Unequal access
Nižný Tvarožec	Public water supply	1 public well	Unequal access
Spišský Hrhov	Public water supply	Individual wells	Unequal access
Chimianske Jakubovany	Individual wells	4 public wells and stream	Unequal access
Makrušovce	Public water supply	1 public well	Unequal access
Bystrany	Public water supply	1 water tap	The water tap is connected to the public water supply. Unequal access
Sečovce	Public water supply	Public water supply	Equal conditions
Markovce	Individual wells	2 public wells	Unequal access
Bystré	Public water supply	Public wells, public water supply	Equal conditions
Nižná Jablonka	Individual wells	2 public wells	Unequal access
Snina	Public water supply	Public water supply	Equal conditions
Trhovište	Wells, Public water supply	5 public wells	Unequal access
Nižná Slaná	Public water supply	Underground stream	Unequal access

Source: Field research results triangulated with data from the Office of the Plenipotentiary of the Slovak Government for Roma Communities, and 2001 census data.

In the 10 cases where settlements had equal access to water, Roma (due to their economic situation) are more likely to encounter difficulties in paying the bill for water consumption. As a result, public utility water companies increasingly switch off water for whole

communities[121]. In the summer of 2004 I witnessed water switch-offs in Zabíjanec, Rudňany, and Trebišov. Since there is only one central water pipe in Zabíjanec and centralized meters for whole blocks of apartments in Trebišov, even those who regularly pay for the water are discriminated against. As of 1 January 2004, there were 2,760 unemployed people in Trebišov, of which 1,700 were Roma. In the summer of 2004 all the people in Zabíjanec depended on social assistance as the only source of regular income.

7.2.3. Flood risks in the settlements

Extreme poverty, discrimination, social exclusion, or loss of entitlements are among the factors contributing to the situation in which some of the Roma settlements are built in locations endangered by floods and poorly protected by technical measures against this type of natural disaster[122]. This mechanism of vulnerability was described in the case study of Roma settlements in the Upper Svinka Watershed and RRA outcomes reinforce these points.

August 2004 brought extensive floods throughout the region. The Roma Press Agency reported that on August 8 no less than 11 houses were flooded in Markovce and about 200 people had to be evacuated. Here, the Ondava River created a lake of almost three square kilometers. The situation was worse in the poorest end of the settlement,[123] which is inhabited by the local Roma community. Although there is no spatial segregation of the Roma settlement from the other houses, only Romani houses are located in the area prone to flooding.

The exposure to floods is more visible in the cases of Roma shantytowns segregated from the main villages. In some cases recent disasters have prompted the authorities to adopt anti-flood measures (this is the case of Uzovske Pekľany, where, after disastrous floods in 1998, the municipality deepened the river bed). In two other villages included in my research sample

[121] As of 2005, water supply companies operate on a regional basis and are state-owned. However, the companies are trying to turn a profit. There is extensive debate in Slovakia about their privatization, which may further increase pressure on profitability.
[122] The term "extreme poverty" in this context means regular lack of basic needs for life such as food and/or fuel for heating.
[123] Full text of the article available at: http://www.rpa.sk/clanok.aspx?o=zc&n=2129&l=en [Consulted 3 September 2004].

(i.e., Petrova and Chimianske Jakubovany), no measures were adopted to address this danger (as of spring 2005). Results of the regional research on flood risks are summarized in Table 13.

Table 13. Potential environmental risks distribution in the appraised settlements

Name of the settlement	Form of risk	Description	Is the risk bigger than in the village (YES/NO)	Comments
Jánovce	NA			
Spišské Vlachy – Dobra Vôľa	NA			
Zbudske Dlhé	NA			
Uzovske Pekľany	Flood	Settlement downstream from the village, regularly flooded in the past	NO	After the disastrous floods in 1998 the municipality deepened the river bed
Dvorníky-Včeláre	NA			
Humenne -Podskalka	NA			
Helcmanovce	NA			
Bardejov-Dlhá lúka	NA			
Rokytov	NA			
Mníšek nad Hnilcom	NA			
Zborov	NA			
Petrova	Floods	Settlement downstream from the village –regularly flooded	YES	
Lenártov	NA			
Krompachy	Industrial Pollution	Settlement under chimneys from the factory	YES	The factory changed technologies in the 1990s and the pollution decreased; nevertheless, the site suffers from previous pollution
Hažín	NA			
Trebišov	Industrial pollution	Slaughterhouse and meat-processing factory in the Roma settlement		Discriminatory waste management practice
Spišské Bystré	NA			
Medzilaborce-Palota	NA			
Nižný Tvarožec	NA			
Spišský Hrhov	NA			
Chimianske Jakubovany	Floods Water contamination	Settlement downstream from the village –regularly flooded; the water is	YES	

		contaminated by waste, since there is no sewage or wastewater treatment in the village		
Makrušovce	NA			
Bystrany	NA			
Sečovce	NA			
Markovce	Flood	Settlement downstream from the village –increased danger of floods	YES	Floods in 2004 impacted only the Roma settlement located in the lower part of the village
Bystré	NA			
Nižná Jablonka	NA			
Snina	NA			
Trhovište	NA			
Nižná Slaná	NA			

The general pattern of this environmental discrimination is linked to past discriminatory settlement policies. The Roma were (usually in the 1940s and 1950s) allowed to settle only in places located outside of the main village, on wetlands or spots known to be high-risk areas for flooding. The limited spatial mobility of the people in shantytowns (resulting from the poor social conditions and lack of any influence on the municipality), combined with protective attitudes of the non-Romani inhabitants of the village, effectively locks them into these places. As one of the inhabitants in Markovce points out:

> We [Roma] live together here, I don't have money to move somewhere else. They [non-Roma] wouldn't sell me a house in the village even if I had the money to buy one. I would prefer to go out of the village somewhere where work is, but I have no money to move to Czechia or somewhere. Even in Trebišov or Košice there are no jobs for us.

Practically all the people I interviewed in the regularly flooded shantytowns had resigned themselves to the situation and considered it a regular part of their lives. The situation has worsened due to the trend toward channelizing the riverbeds of streams flowing through villages. This is usually part of the municipal plans for making the village look "nicer" as described by one of the municipal council members in the village Uzovske Pekľany.

7.3. RESULTS OF THE RAPID APPRAISAL

General trends of discrimination against the Roma in terms of access to job markets, unemployment, and lower levels of education is present in all of the Roma settlements I analyzed. However, these general trends are amplified on the local level by hostility of the local people and unequal environmental conditions in the settlements.

There are indications that in some of the settlements included in the RRA there are positive trends presented and the majority-minority relations have progressive development. A case like Hrhov presents a positive example of Roma and an ethnic majority community living in relatively comparable conditions. The Roma houses are in good repair, located in the corner of the village, and there is no spatial segregation, with the exception that Roma live together. The municipality built the Roma a community center and Roma participate in the life in the village. The majority of Roma in Spišské Vlachy – Dobra Vôľa live in new houses built with the help of the local municipality. Roma from Bystrany were able to unite and elect first ever Roma mayor in the municipality. These cases would deserve deeper in-depth studies for better understanding of the positive trends. However, this is not the prevailing picture of the Roma shantytowns in the region as revealed by the RRA.

Out of the sample of 30 settlements, I would describe (bearing in mind the general adverse situation of Roma) only eight of the Roma settlements as equally positioned in terms of equal access to water and equal exposure to environmental harm (i.e., industrial pollution or/and floods). Results of the regional study are summarized in Table 20.

Figure 19. Combined exposure to the higher environmental risks and unequal access to water supplies in the appraised Roma settlements (each number represents one specific settlement included in the RRA (see the list below the figure)*

	Equal access to water	**Discrimination in access to water**
Higher than equal environmental risk	**12, 14, 16, 25**	**4, 21**
Equal environmental risk	**2, 6, 8, 9** **24, 26, 28**	**1, 3, 5, 7, 10, 11, 13** **15, 17, 18, 19, 20, 22** **23, 27, 29, 30**

******Appraised Roma settlements:* 1. Jánovce; 2. Spišské Vlachy – Dobra Vôľa; 3. Zbudske Dlhé; 4. Uzovske Pekľany; 5. Dvorníky - Včeláre; 6. Humenne – Podskalka; 7. Helcmanovce; 8. Bardejov-Dlhá lúka; 9. Rokytov; 10.Mníšek nad Hnilcom; 11. Zborov; 12. Petrova; 13. Lenártov; 14. Krompachy; 15. Hažín; 16.Trebišov; 17. Spišské Bystré; 18. Medzilaborce – Palota; 19. Nižný Tvarožec; 20. Spišský Hrhov; 21. Chimianske Jakubovany; 22. Makrušovce; 23. Bystrany; 24. Sečovce; 25. Markovce; 26. Bystré; 27. Nižná Jablonka; 28. Snina; 29. Trhovište; 30. Nižná Slaná.

Only seven settlements in the sample may be evaluated as equal in exposure to environmental threats and access to environmental benefits. The most unequal situation is in access to water. As many as 17 Roma settlements are in worse condition than non-Roma equivalents in the same village. Either the public water supply supports only the non-Romani parts of the village or the Roma shantytowns depend on one to several wells with questionable water quality. In two cases (Uzovske Pekľany and Chimianske Jakubovany), this unequal treatment is

accompanied by higher susceptibility to floods. In four cases access to water is relatively equal, but the Roma in the settlements face other environmental threats such as industrial pollution (Krompachy) or exposure to floods (Petrova and Markovce).

Taking into account the general situation of the Roma in the sample of 30 communities (including the size of the community, social and economic conditions, and scope and potential impacts of environmental threats) I consider the situations in Krompachy and in Chimianske Jakubovany to be the most critical and requiring immediate response from all stakeholders. Permanent exposure to toxic residues from industrial production (Krompachy) and 1,092 people, mostly children, in Chimianske Jakubovany living in mud on wetlands represent the sharpest illustration of unequal treatment, discrimination, and indifference.

CHAPTER 8. GENERAL CHARACTERISTICS OF THE ROMA IN SLOVAKIA FROM THE PERSPECTIVE OF ENVIRONMENTAL JUSTICE

In the previous chapters I analyzed different forms and impacts of unequal distribution of environmental benefits and harm based on two cases studies and regional research. Social factors were discussed through the perspective of their contribution to environmental injustice. In this chapter I attempt to conceptualize outcomes of the research about environmental justice in Slovakia.

The cases of local disparities and unequal treatment identified and analyzed throughout the research confirmed the initial hypotheses. If we look at social and ethnic characteristics of the people impacted by the unequal exposure to environmental harm (or possessing limited access to environmental benefits) in more detail, we find that there are significant differences between the non-Roma majority and the Roma population. Poverty and ethnicity play a significant role, and Roma in the eastern regions of Slovakia are the group where social and economic inequalities transformed into the inequalities in distribution of environmental benefits and harm. Four main patterns of the inequalities were identified in the research

8.1. PATTERNS OF ENVIRONMENTAL INJUSTICE

Patterns of environmental injustice are defined here as specific, representative types of interactions between humans and the environment, where environmental benefits and/or harm are unequally distributed. They are used for the description of the interactions leading to environmental injustice and for analyses of the dynamics behind them. Construction of the patterns helps to understand the dynamics of the social processes contributing to their origin and serves for better analyses of opportunities offered by development policies (focusing especially on environmental management) to reduce vulnerability of the affected people to environmental injustice and improve their well-being.

The four patterns of the unequal distribution of environmental benefits and harm identified in the research are: (i) exposure to hazardous waste and chemicals (settlements at contaminated sites); (ii) vulnerability to floods; (iii) differentiated access to potable water; and (iv) discriminatory waste management practices. While the four identified patterns of environmental injustice may not (and probably they do not) represent all potential forms of environmental injustice, they summarize patterns identified in the field research.

8.1.1. Patterns of environmental injustice – description

The four identified patterns result from field research in five settlements in two case study locations (two in Rudňany and three in the Upper Svinka Watershed); analyzed vis-à-vis information gathered throughout the region from another 30 randomly selected Roma settlements in eastern Slovakia. The total was 35 individual settlements (or shantytowns). The results confirm that the conditions identified in the case studies do not represent an extreme case of atypical local conditions, but rather they represent patterns of environmental injustice that can be found also in other places. See Table 14 for a detailed account.

Table 14. Settlements analyzed in the case studies and assessed in the RRA and their categorization according to the four patterns of environmental injustice

List of all appraised settlements and presence of patterns in the settlements
All appraised Roma settlements (RRA and case study sites) 1. Jánovce; 2. Spišské Vlachy – Dobra Vôľa; 3. Zbudske Dlhé; 4. Uzovske Pekľany; 5. Dvorníky - Včeláre; 6. Humenne –Podskalka; 7. Helcmanovce; 8. Bardejov-Dlhá lúka; 9. Rokytov; 10.Mníšek nad Hnilcom; 11. Zborov; 12. Petrova; 13. Lenártov; 14. Krompachy; 15. Hažín; 16.Trebišov; 17. Spišské Bystré; 18. Medzilaborce – Palota; 19. Nižný Tvarožec; 20. Spišský Hrhov; 21. Chimianske Jakubovany; 22. Makrušovce; 23. Bystrany; 24. Sečovce; 25. Markovce; 26. Bystré; 27. Nižná Jablonka; 28. Snina; 29. Trhovište; 30. Nižná Slaná; 31. Rudňany – Pataracke; 32. Rudňany – Zabijanec; 33. Jarovnice; 34. Hermanovce; 35. Svinia.
Pattern 1 - Exposure to hazardous waste and chemicals 14. Krompachy; 31. Rudňany-Pataracke; 32. Rudňany-Zabijanec.
Pattern 2 – Vulnerability to floods 4. Uzovske Pekľany; 12. Petrova; 21. Chimianske Jakubovany; 25. Markovce; 33. Jarovnice; 34. Hermanovce; 35. Svinia.
Pattern 3 – Differentiated access to potable water 1. Jánovce; 3. Zbudske Dlhé; 5. Dvorníky - Včeláre; 7. Helcmanovce; 10.Mníšek nad Hnilcom; 11. Zborov;13. Lenártov; 15. Hažín; 17. Spišské Bystré; 18. Medzilaborce – Palota; 19. Nižný Tvarožec; 20. Spišský Hrhov; 22. Makrušovce; 23. Bystrany; 27. Nižná Jablonka; 29. Trhovište; 30. Nižná Slaná; 31. Rudňany-Pataracke; 32. Rudňany- Zabijanec; 33. Jarovnice; 34. Hermanovce; 35. Svinia.
Pattern 4 – Discriminatory waste management practice 16.Trebišov; 26. Bystré; 31. Rudňany-Pataracke; 33. Jarovnice; 34. Hermanovce; 35. Svinia.

The five settlements analyzed in the two case studies confirmed the initial assumptions that there is unequal distribution of environmental benefits and harm. Out of the 30 settlements included in the random sample, as many as 24 revealed some form of unequal distribution of

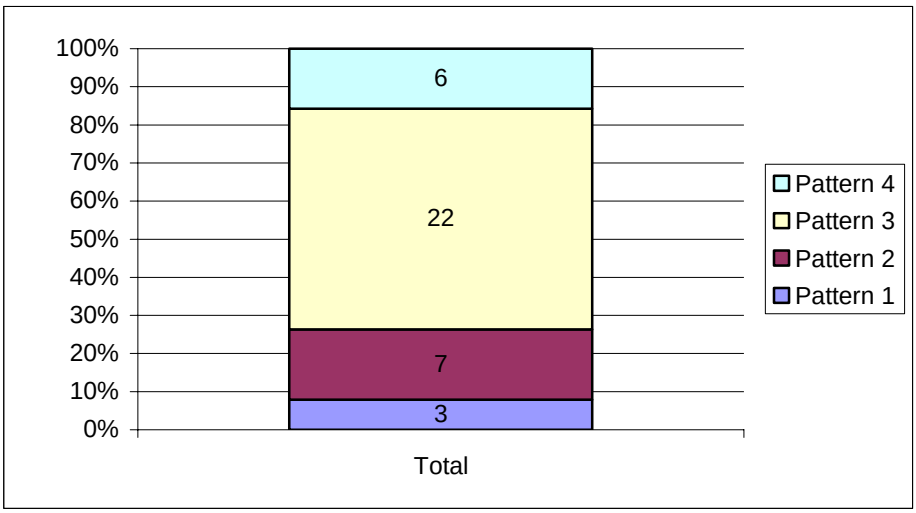
environmental benefits and harm, while access to potable water is by far the most common form.

The scope and impact of the unequal distribution of environmental benefits and harm differ from settlement to settlement. It is a different impact if 400 people from Bystre do not have potable water compared to Jarovnice, where almost 3,000 people have unequal access to it. It is difficult to compare (without detailed measurement and monitoring) if there is a bigger threat to human health in Zabíjanec or in Pätoracké. Nevertheless, the patterns help us to understand the forms and potential impacts of environmental injustice. Their presence in the research sample was the following:

- Exposure to hazardous waste and chemicals: The case of Rudňany is very similar to that in the settlement of Krompachy, and confirms links between poverty, ethnic origin, and the location of settlements on derelict industrial sites.
- Vulnerability to floods: The three villages, Jarovnice, Hermanovce, and Svinia (case study Upper Svinka Watershed) exposed to floods in the past are not the only case of environmental injustice; Petrova, Cminianske Jakubovany and Markovce support the hypothesis that Roma settlements are often located in vulnerable environmental situations.
- Limited access to potable water: The most widespread form of discrimination against people in shantytowns. The situation in Svinia (the Upper Svinka Watershed case study) is very typical for many Roma settlements in eastern Slovakia. Out of the random sample of 30 settlements, I found unequal access in 17 Roma shantytowns.
- Discriminatory waste management practices: Trebišov and Svinia provide examples of unequal treatment of the Roma communities in waste management.

The first two patterns (industrial pollution and floods) relate to environmental conditions in places designated or chosen for Roma shantytowns prior to the settlement itself. The latter two (access to water and waste management) relate to practices in municipalities with already settled Roma communities. Figure 20 illustrates the number of cases in the case study research and RRA identified for each of the four patterns.

Figure 20. Presence of the different patterns of environmental injustice in the appraised Roma settlements



The most widespread pattern of unequal treatment is access to water and sanitation, with pipelines ending before they reach a Roma shantytown. One (or several) insufficient wells with low-quality drinking water for several hundred people in the shantytowns are rather common. Areas regularly flooded in the past were often designated by local municipalities as land for the construction of shantytowns and the increasing occurrence of floods (due to mismanagement of the landscape and/or climate change) expose these people to a gradually higher risk of property and health damages. Roma shantytowns on the derelict factory sites in Rudňany or under the chimney of the copper wire producer in Krompachy provide quintessential examples of environmental injustice when it comes to the distribution of environmental benefits and harm.

8.1.2. Pattern 1 – exposure to hazardous waste and chemicals

This pattern describes contaminated sites where vulnerable human-environment systems exist and where Roma shantytowns are located (e.g., in Rudňany or in Krompachy). Contaminated sites are a legacy of past industrial and economic development. In Slovakia this pattern is closely related to the post-war industrialization and a heritage of the production and consumption patterns that will affect the next generations. Careless use of chemicals, wasteful technologies, improper waste disposal, and mismanagement, together with a lack of

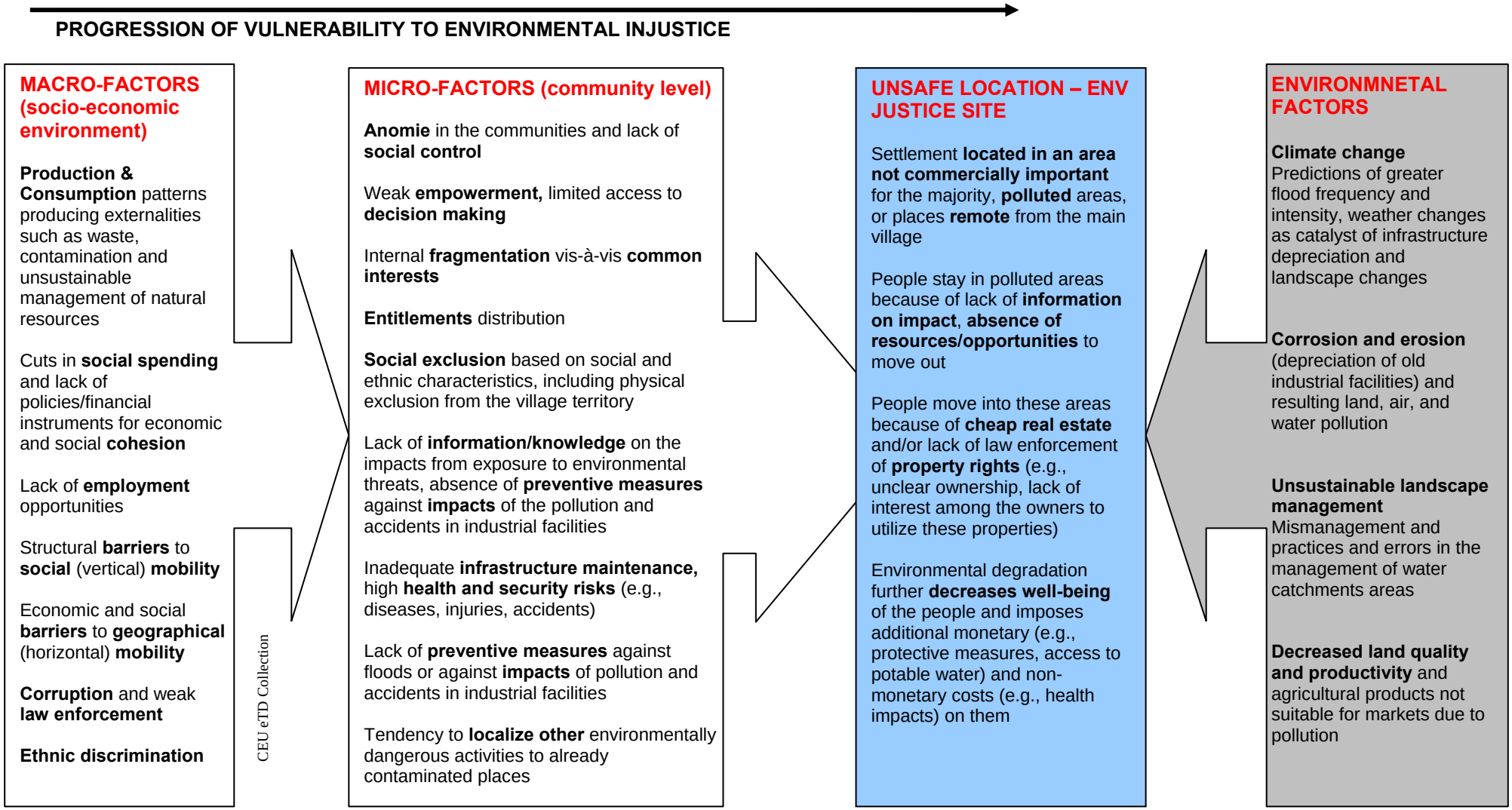
responsibility and accountability, have resulted in contaminated areas and polluted water and air, and present a risk to the environment and people.

Companies and enterprises left behind hazardous materials. Over the years the supporting infrastructure has deteriorated, mining waste or deposits in soil release chemical substances into the water and air, mines filled by ground water may start leaking, and buildings may fall due to subsidence caused by past mining underground. Remediation is an externality which was not internalized in the operational costs when the sites were profitable. Remediation costs are imposed on the state budget or on people from surrounding areas exposed to health risks and a deteriorating environment.

Contamination of air, water and land influences vegetation and agriculture, it decreases land productivity and makes agricultural products unsuitable for markets. Degradation of groundwater and drinking water sources may push people to collect water from distant sources (work mostly done by women and children). Contaminated land, and polluted water and air mean endangered health for the people in various forms, from allergies to cancer depending on the chemicals. Children and women are especially endangered since they are less able to cope with the chemicals or spend most of their time at home. The sites are places of physical danger. There are risks of injuries (falling into shafts, landslides) in cases where poverty leads people to collect materials from abandoned sites or where there is direct contact with the contaminated materials.

Poverty, besides pressure from the majority population, brings people to the contaminated sites and poverty keeps them there. Besides the direct health impact, the environmental burden disproportionably imposed on the people has implications for their social situation and limits their range of opportunities. It imposes additional costs on these people. Structural pressures that contribute to the differentiated exposure to environmental threats are summarized in Figure 21.

Figure 21. Structural factors and differentiated exposure to environmental threats



The structural economic, social, and environmental pressures contribute to the "vicious circle" of deteriorating conditions in the shantytowns exposed to pollution from contaminated sites. People have to protect themselves against the environmental conditions. They suffer health problems which diminish their opportunities for social or geographic mobility. Houses they possess can not be sold because as the contamination or information about the problem spreads, properties lose value. This can attract more poor people, while those who have a chance leave. This may lead to a deepening of social anomie in shantytowns.[124] Contamination brings collapse of agriculture, tourism and other soft industries. People are "locked" into their places.

A key problem in addressing the environmental conditions of people affected by contaminated sites is addressing their social situation and racial discrimination. It is poverty, lack of employment opportunities, and racial discrimination that bring people to settle in their proximity. Policies and measures for poverty alleviation and strategies for social integration of the marginalized groups are the basic policy options for addressing the problem.

8.1.3. Pattern 2 – vulnerability to floods

In this pattern I focus on vulnerability to floods in settlements built in zones regularly flooded. Environmental injustice is that many of the places allocated for Roma shantytowns in the past were places known for high vulnerability to floods. People have managed to confront the flood hazard throughout history by finding suitable places for settlement. Over years of observations and practical experience, areas that regularly flooded were well known to the village inhabitants. These areas were not selected for construction of houses or other infrastructure. They were usually left abandoned, used as grassland, or sometimes (as the research reveals) allocated to poor newcomers.

[124] Anomie – a concept developed by Emile Durkheim (1858-1917) to describe an absence of clear societal norms and values. Individuals lack a sense of social regulation: people feel unguided in the choices they have to make. *Source:* Online Dictionary of the Social Sciences at Athabasca University http://bitbucket.icaap.org/dict.pl?alpha=A [Consulted 29 August 2006].

During the 19th and 20th centuries, large parts of the river courses have been artificially changed, as have the conditions in their catchments. Land cultivation, extensive farming and building of settlements increased water run-off. The mismanagement of water catchment areas reduced the natural absorptive capacity of the land and causes wide-ranging erosion resulting in flash-floods, especially on foothills. In the Slovak Republic construction of water dams culminated in the 1950s and 1960s (as a part of socialist "industrialization"). Besides the construction of dams, it included changes to hydrological cycles and dewatering of Slovak basins. At the same time, agriculture went through the process of collectivization. Former small fields and pastures usually managed by family farms were changed into mass-production agricultural cooperative farms in the 1950s and 1960s. This mass-production introduced new techniques of landscape management (e.g., area dewatering, irrigation channels, wetland draining) with strong impacts on the land's absorption capacity. Deforestation and monocultures of newly planted forests contributed to decreased retention capacity as well. These changes meant also variations in flood occurrence and intensity.

Another factor important in this respect is climate change. An increased global temperature would also lead to an accelerated hydrological cycle and likely result in severe droughts and flooding in areas that are now productive farming regions (Rosa 2001). One of the discussed aspects of climate change in Slovakia has been the increased occurrence of floods. To what extent floods are an outcome of climate change and/or other human contributing activities would require intensive and complex scientific research. In any case, it will be people living in the flood zones who will experience the impacts. As Nishioka (1999) puts it:

> While too much emphasis is put on the global aspects of climate change, local concern and people's initiative as residents in local environment are not fairly dealt with, in spite of the fact that the actual impacts of climate change appear locally and those who respond to the impacts are the people who live there.

Policies of the central and local government are to address floods through technical measures (e.g., diverting the streams in pipelines, channelizing the river beds and building artificial banks for the rivers).[125] As a result, water flows through the country on the upper streams much faster, overflowing the riverbanks at the first opportunity downstream. Thus, artificial

protective measures located upstream may impact villages downstream and especially those who are already living in the zones most prone to flooding.

Mustafa (1998) interprets vulnerability as the powerlessness of individuals, groups, and classes to influence decisions that determine their exposure to the hazard. Predictions are that (in the future) we may expect more frequent and more intensive floods. Many geographic areas of Slovakia have been exposed to this risk in the past and in the present. However, not all the people are equally vulnerable. Marginalized groups, unable to choose a good place for settlement may find themselves unequally exposed to floods.

Floods in eastern Slovakia in June of 2006 had effects also on villages with Roma minorities. In Beniakov, Svedlar or Olejniky it was mostly Roma who were impacted by the water and whose houses were flooded. In Beniakov, with 570 inhabitants, it was only 100 people from the local Roma shantytown who needed to be evacuated[126]. Increasing occurrence and intensity of floods due to the cumulative effects of human activities makes the problem of places which were allocated for Roma settlements in the past more visible.

8.1.4. Pattern 3 – differentiated access to potable water

This pattern deals with unequal access to potable water. Clean and safe water can be characterized as a basic condition for human well-being. If some of the people have worse access than others to this natural resource due to missing infrastructure, exclusion from construction projects and/or being cut off from the water supply then we can characterize the situation as environmental injustice. It is a situation where there is enough potable water, but through various barriers there is not enough potable water for everybody.

[125] See for instance, the proposal of the new Act on Flood Protection elaborated by the Slovak Ministry of Environment in 2004, or the Ministry's 2004 proposal of *The Anti-flood Programme until 2010 in the Slovak Republic*. Available at: http://www.enviro.gov.sk/ [Consulted 5 January 2005].
[126] Roma Press Agency. 6 June 2006. *Zaplavení Rómovia z Beniakoviec začali upratovať svoje domy* [Flooded Roma from Beniakov start to clean their houses]. Available at www.rpa.sk [Consulted 14 August 2006].

Lack of access to potable water further decreases development alternatives of marginalized communities. People who do not have access to clean water suffer an increased incidence of a range of gastro-intestinal and skin diseases. Infant mortality tends to be much higher and life expectancy is much lower (Perrings and Ansuategi 2000).

The eastern Slovakia region falls below the Slovak average in most of the numbers related to access to public water supply systems. However, when we analyze the situation on the community level (as described in the case studies and RRA), we see that Roma shantytowns are in comparatively worse situations in access to water than non-Roma people living in the villages. Differentiated access to potable water is the most widespread pattern of environmental injustice identified in this research.

Pipelines ending on the border of non-Roma parts of villages, Roma collecting water from streams or several wells serving hundreds of people is a rather common picture. Most public water supplies were built with support from the state budget in the former state socialism regime or have been constructed after the political changes. In both cases it required co-financing from the end users. Roma settlements are often illegal or do not comply with the building code and other relevant legislation. The people do not have money to pay for the construction and they are not lucrative consumers for water-supply companies.

The EU and governmental funds allocated for construction of water infrastructure (as a part of compliance with EU legislation) are the most important sources of investment for the Roma shantytowns' water supply. Connection to a water supply is a positive factor, but if the people in Roma communities stay in their critical social situation it may turn out to be a rather problematic investment. When visiting the Roma settlement of Pätorackć in August 2004, I found the whole community disconnected from the water supply because most of the families were not able to pay for the water. Another example was published in the Slovak daily *SME* in April 2005:[127]

> Approximately 5400 people, out of them 2800 children, is more than a week without water for cleaning, washing and cooking. They neither live in a war zone nor are they affected by a natural disaster. They were disconnected because

[127] *SME Daily*, April 25, 2005: Havária ako trvalý stav [Accident as a permanent situation]. See: www.sme.sk/clanok.asp?cl=2023999 [Consulted 5 May 2005].

> out of 800 families living in 666 flats in Lunik IX [a quarter in Košice city inhabited by Roma] only 22 tenants regularly pay water fees.

Technical access to infrastructure is one thing; the real possibility of enjoying this is another. Roma in shantytowns face technical and economic barriers in access to potable water. While the technological barriers are more connected to discrimination on the local level (e.g., exclusion from community projects, weaker negotiation positions and networks in the decision making on infrastructure construction), the economic barriers are deeper and involve structural discrimination on the job market, social exclusion, and marginalization.

8.1.5. Pattern 4 – Discriminatory waste management practice

This pattern describes discriminatory systems of waste collection and disposal and how the impacts from waste management practices are distributed in communities with Roma shantytowns. Waste management has become one of the most important challenges for many municipalities. A growing amount of waste and resistance from people against construction of new landfills in the proximity to their dwellings (the "not in my backyard" syndrome) contribute to a situation where the burden of waste management may become discriminatory and disproportionably imposed on social or ethnic groups with weaker negotiation positions, access to decision making, and weaker networks protecting their interests.

A few times a year the Rudňany municipal council organizes a "cleaning Saturday." Containers are placed at several places in the village and inhabitants may get rid of various waste and trash they collected throughout the year free of charge. After the event, trucks empty the container and drive the waste to the place beneath the Roma settlement in Pätoracké, where they dump it in the field. The Roma of Hermanovce and Svinia living in segregated parts of the villages live in close proximity to recently built landfills. When the responsible municipality's councils took decisions on the location of the village municipal landfill (Hermanovce) in 1980s and a new landfill for local supermarkets (Svinia) in 2002 they located them in the parts of the villages inhabited by Roma. Roma are thus frequently found to live in landfill areas contaminated by waste. Weakly protected landfills subsequently attract the most impoverished people to search there for an alternative income.

8.2. IMPACTS OF THE UNEQUAL DISTRIBUTION OF ENVIRONMENTAL BENEFITS AND HARM

I identify two broader areas where environmental injustice impacts the Roma. The first is the direct financial impact on the ethnic group and its individual members. Here belong the monetary costs affiliated with environmental injustice. These are health care costs, payment for reconstruction after floods or for protective measures. The second is the non-monetary impact in the form of poor health, opportunity costs or decreased social mobility. The impact of environmental injustice is that it further deteriorates the already problematic social situation in Roma shantytowns. It imposes additional burdens on these communities and disadvantages them vis-à-vis communities not affected by the environmental impacts.

Among the most important costs are health impacts, social mobility, opportunity costs, or the cost of mitigating measures and protection against impacts. Some costs can be estimated in monetary terms, some are difficult to quantify. The costs identified throughout the field research are summarized in Table 15.

Table 15. Monetary and non-monetary costs of the environmental burden

Monetary	**Non-Monetary**
►Health care cost	►Impacts on heath
►Property value (losses)	►Opportunity cost
►Cost of protective/preventive measures	►Social and geographic mobility
►Reconstruction cost and material	►Environmental stress
	►Personal dignity
	►Quality of life

The most adverse impact of the environmental and social situation in the segregated Roma settlements is the impact on health. Overcrowding, lack of sanitation and water, poorly maintained housing and environmental conditions render their inhabitants more susceptible to infectious diseases than other groups. Unequal exposure to environmental threats and problematic access to environmental benefits are accelerating factors in the affected communities.

Malnutrition, poverty and resulting lifestyles, poor water and exposure to environmental harm make the lives of Roma short. The average life expectancy of men in Slovakia is 67 and for women 74. At the same time, the life expectancy of Romani men is 55 and for Romani women 60 (Kalibová 1989; WB 2003). In Rudňany (where Roma represent 38% of population) in 2003 there were as many as 354 people older than 61 years, of which only 15 were Roma.

According to Šaško (2003), "life in Roma [rural] settlements without quality drinking water, built sewage systems or septic tanks for waste water and piling and quickly decaying communal waste brings high health risk to the inhabitants". This is the daily reality in Svinia, Chminianske Jakubovany, and many other settlements in the research sample. As a social worker in Hermanovce points out: diarrhea is quite common in the summer, especially among the children. Last summer [2003] we witnessed some kind of [skin?] allergy among the children who played all day long in the water during the heat in the summer. Exposure to toxic waste has long-term effects visible only in a longer time period. This is the case of Rudňanyand Krompachy. The health impacts of environmental injustice are the most difficult to estimate and measure, while at the same time they represent the worst outcome of the unequal distribution of environmental benefits and harm.

In settlements like Hermanovce or Svinia environmental conditions (i.e., poor quality water and lack of sanitation) contribute to the higher occurrence of water-borne diseases. The diseases must be cured and treatment requires a financial contribution from the patients. It also influences the quality of life, attendance of children at school (with a longer term impact on their future), and the ability of people to work.

Besides health care costs, regular floods impose another financial burden on the people affected. Roma settlements located in flood zones (e.g. Chminianske Jakubovany or Markovce) are regularly flooded, which means additional costs of reconstruction and materials. Compared to the non-Roma, Romani houses are rarely insured. There are three main reasons for this. Firstly, insurance companies are increasingly careful to avoid insuring houses in flood zones.[128] Secondly, you need to have legal status for the house in order to be

[128] According to a personal interview with the representative of one of the biggest Slovak insurance companies, the increased number of floods has changed their policies since the mid-1990s and they now rely on statistical data and on-site visits before insuring new houses.

able to insure it. Last but not least, most Roma in the shantytowns could hardly afford to pay for the insurance anyway.

Supplying water in the cases like the Roma shantytown Spišské Bystré requires substantial effort, time, and energy. Romani women and children have to carry water from nearby wells on the cooperative farm or from the neighborhood[129]. The distance is around 1 kilometer. Thus cooking and washing in the Roma community are hard jobs and involve substantial amounts of labor. Creation of basic living conditions (e.g., water for cooking) or reconstruction of houses after floods consumes time and energy which could be used for other activities. This refers to the opportunity cost of these activities[130].

The term social mobility refers to the movement of individuals and groups among different socioeconomic positions (up or down the socioeconomic scale). Lateral mobility refers to geographical movement (freedom to choose a place to live)[131]. Environmental injustice contributes to decreased mobility in both cases. In the case of social mobility, an environmental burden negatively influences the opportunity to ascend the socioeconomic scale. Affiliated economic and social costs limit opportunities of the Roma. In combination with other social and economic factors these in practice push the Roma further down the scale.

The geographical mobility of Roma from shantytowns has been decreasing constantly since the 1989 introduction of economic reforms, the split of Czechoslovakia in 1994, and a worsening of the social and economic situation in the beginning of the 2000s (Mann 2002; ILO 2004)[132]. Exposure to environmental injustice is a limiting factor in lateral mobility since it imposes additional social and economic costs on the affected people. All the monetary and non-monetary costs deeply affect Roma communities and put them in a disadvantageous position in the region, which is already severely impacted by economic transition.

[129] Household labor among Roma is traditionally reserved for women and children.
[130] According to the Concise Encyclopedia of Economics, when economists refer to the "opportunity cost" of a resource they mean the value of the next-highest-valued alternative use of that resource. If, for example, you spend time and money going to a movie, you cannot spend that time at home reading a book, and you can't spend the money on something else. If your next-best alternative to seeing the movie is reading the book, then the opportunity cost of seeing the movie is the money spent plus the pleasure you forgo by not reading the book. Available at: http://www.econlib.org/library/Enc/OpportunityCost.html [Consulted 5 March 2006].
[131] See Giddens 1993 or Albrow 1999 for more details.
[132] We have to distinguish that some Roma (possessing financial capital, contacts, and networks) may have their mobility increased due to open borders and EU integration. This is not the case, however, of people in the marginalized rural shantytowns included in the research sample.

8.3. DISCUSSING THE ROOTS OF ENVIRONMENTAL INJUSTICE

The patterns represent four specific types of unequal distribution of environmental benefits and harm. Although different in forms and scope, they possess several common features. They are the outcome of division in the villages, where through social processes the weaker group (Roma) is unequally exposed to adverse environmental impacts or has limited access to environmental benefits. With a bit of exaggeration, the location of settlements, management of natural resources or waste is an outcome of the Cold War over the space in villages and the environment plays an important role in the struggle. I identify three main factors influencing decisions of the majority towards the selection of environmentally problematic places for Roma settlements. These are:

- Economic interests (the price of the land/real estate value, commercial potential);
- Ethnic discrimination and spatial distance (proximity to the main village and racial prejudices/the effort to push Roma out of the main village), and
- Competition over resources (entitlements, management of the resources and access to employment).

Economic interests are a very powerful driving force behind decision making, but ethnic discrimination also plays an important role. Non-Roma do not want Roma in the main village and are often able (as illustrated in the case of Rudňany) to find ways to push them to the outskirts. Environmental conditions may (mainly through their impact on the value and commercial potential of the land) play a decisive role in the selection of places for settlements. Once the places for the settlements are selected and inhabited by Roma they may become places for other environmentally unfriendly activities (e.g., construction of landfills like the case of Svinia). The space is then constructed as "beyond the pale."

8.3.1. Economic interests

The environmental aspects are especially important in connection to economic factors. Barth (1956), in his study on three ethnic groups in Swat, West Pakistan, concluded that

environmental factors are crucial to explaining the location of different groups. Location of a group in his understanding is the result of ongoing competition between different social and ethnic groups and if different groups are able to exploit the same niches fully then the more powerful will normally replace the weaker.

The distribution of ethnic groups is then controlled not by objective and fixed "natural areas", but by the distribution of the specific ecologic niches which the group, with its particular economic and political organization, is able to exploit. Canfield (1973) questions Barth's conclusions and points out that Barth's concept must be understood in the way that relations with competitors – in a spatial context – are as important as those with natural resources. Barth's and Canfield's studies point out two important factors in the distribution of environmental resources and places different social or ethnic groups occupy. These are environmental factors (expressed in economic values) of a particular place and social relations between the groups.

Arable land, pastures or productive forests had (and still have) high values in rural communities of eastern Slovakia. A growing tourist industry increases the importance of entitlements over natural resources. Environmental conditions (expressed in economic values) were strong factors in decisions on where to allow Roma settlements to be built. Wetlands, flooded zones, unproductive land or abandoned areas were the first selection. Roma as the newcomers with limited ability to buy land had limited choices to negotiate.

Sometimes the value of the land and commercial potential change over time. An agriculturally unattractive piece of land allocated to the Roma a century ago may turn out to be of good value decades later when the tourism industry develops. The case of Letanovce illustrates this point. The Roma settlement in the part of the village called Letanovsky mlyn is located in the valley leading to the national park. As the mayor of the village stated: "As soon as we eliminate the former Roma settlement, we plan to build tourist facilities and parking lots in Letanosvky mlyn"[133]. In the perception of non-Roma the location of the Roma settlement is one of the main obstacles for the development of the tourist industry in the village.

[133] Letanovský mlyn sťahujú do novej osady [Letanovsky mlyn will move into a new settlement]. Slovak daily *SME*, April 28, 2005. Available at: http://www.sme.sk/clanok.asp?cl=2028448 [Consulted 30 May 2005].

In the spring of 2005 the municipality started to construct new public housing for Roma from Letanovce. They allocated a place which is 3 kilometers out of the village for these new blocks of houses. Furthermore, there is no direct road connecting this place and the village. The mayor of Letanovce said in the Slovak daily *SME*: "Owners from Letanovce refused to sell land any closer to the village"[134]. The case of Letanovce illustrates ways the majority decides about minority' settlement. It is very probable that the process we see in the present time reflects longer-term practices going back into history. The economic value of the land and commercial opportunities for land exploitation are key factors when the non-Roma majority of land owners and decision-makers decides about places for Roma settlements.

8.3.2. Ethnic discrimination and spatial distance

Gordon Allport (1954) identified a five-point scale for different intensities of prejudices and social and ethnic tensions: (1) Gossiping, stressing only negative aspects or stereotyped estimation in which the members of a group or nation are represented as lazy, cunning, cowardly, dirty, evil, etc.; (2) Avoiding any contact and creating a social distance; (3) Discrimination in various spheres of life by which particular rights of the group in an inferior position are deprived; (4) Physical attacks as a transition from the verbal to bodily aggression; and (5) Extermination (pogroms, genocide, ethnocide). The first three points may be used to describe the situation in shantytowns included in the research sample. Out of them, point 2 (avoiding contacts and creating social distance) is of particular importance for conditions enabling environmental injustice. Attempts to create social distance are supported by measures to create spatial distance (or geographical barriers) between non-Roma and Roma.

The case studies of Rudňany and Hermanovce as well as outcomes of the RRA point to the problem of distance. Non-Roma and Roma are segregated practically from the cradle to the grave. Children attend separate classes in Hermanovce, there is a separate shop for Roma in Svinia, and separated masses for Roma in the local Roman Catholic church in Zehra. The circumstances of re-settlement projects for Roma in Rudňany and in Svinia in the 1970s and

[134]Letanovský mlyn sťahujú do novej osady [Letanovsky mlyn will move into a new settlement]. Slovak daily *SME*, April 28, 2005. Available at: http://www.sme.sk/clanok.asp?cl=2028448 [Consulted 30 May 2005].

1980s, respectively, and the selection of places for re-settlement can be best explained by the attempts of the majority to push Roma out of the centers of villages and create a spatial distance between the two groups.

Creation of social distance (reflected in spatial patterns of settlement) is a factor in the housing projects which were under development and construction in the late 1990s and 2000s. New housing projects developed in Svinia, Letanovce, Spišské Vlachy-Dobra Vôľa and in Hermanovce have one thing in common. New houses are planned (or already built) in places most distant from the centers of villages. In the case of Letanovce, the municipality selected a place so distant from the village that it is now closer to the centers of neighboring municipalities than to the village itself.

Prejudices and open and/or latent racism play important roles in the decision making concerning Roma settlements and exposure to the environmental threats. Non-Roma have often tried to allocate places for the Roma settlements as far away from the village as possible. To have Roma neighbors has a direct impact on the decreasing price of real estate on the market since it is a decisive factor for non-Roma buyers.[135] Living next to Roma is considered as a disadvantage among the majority. You can hardly sell your property to people from cities looking for weekend houses or to your fellow neighbors from the village. Thus, the two most important factors in the selection of places are (were) the economic value of the land and proximity to the village. Environmental factors in the places selected were either not taken into account or were neglected. The latter case may be affiliated with the racial prejudices about Roma as "dirty" or "filthy" and not deserving any better treatment.

8.3.3. Competition over resources

The third important factor in the pressure for segregation (and thus indirectly for environmental injustice) involves the social aspects of the relationships between Roma and

[135] Houses in close proximity to shantytowns are the cheapest houses in the villages. It could be possible to assess this using a method like Hedonic prices, which estimates economic values for ecosystem or environmental services that directly affect market prices. It is most commonly applied to variations in housing prices that reflect the value of local environmental attributes. More information on the method is available at: http://www.ecosystemvaluation.org/hedonic_pricing.htm [Consulted 5 March 2006].

non-Roma. Roma, who traditionally worked as seasonal workers on cooperative farms, miners or lumberjacks, are not needed anymore in the labor force. A decrease in agricultural production and mining and new technologies and machines in agriculture and forestry has been gradually reducing demand for unskilled workers. These changes have deeply affected also non-Roma inhabitants of villages. As the Roma were among the first who lost their jobs, the non-Roma focused on protecting the remaining opportunities.

The Roma thus lost one of the very few reasons they were tolerated by the majority. As Asad (2002) points out, landlords do not need to worry about how to make themselves indispensable to the landless; it is the latter who must worry about making themselves acceptable to the landlords. Since Roma are no longer needed for the villages' economies, there is no reason (from the perspective of the majority) to have them in the village.

The perspective of the non-Roma majority could be described as ethnocentric. Ethnocentricity here refers to the tendency to look and evaluate the outside world predominantly from the perspective of one's own culture. William Graham Sumner seems to be the first to coin the term. He describes ethnocentrism as a situation where one's own group perception is that they are the center of everything and all other groups are judged from this point of view (Reynolds *et al.* 1987; Bannister 1992). The central group's perception is that their race, culture and norms are superior to those of others. In this way, other groups and their individual members are judged as less valuable or important.

Roma are seen as an inferior group and, at the same time, competitors for scarce resources. Outside pressure to increase expenditures on infrastructure in Roma shantytowns or positive affirmation is often interpreted by non-Roma as measures to enhance the position of Roma on their account. Roma communities are perceived as an obstacle to the development of economic activities (e.g., the tourist industry), security or to the social cohesion of the village (e.g., Roma shantytowns as the reason for younger people looking for life opportunities outside the village). These factors contribute to efforts to segregate Roma from the villages.

8.3.5. Social capital as a precondition and as a tool

As I illustrated above, in the case of Roma shantytowns and the surrounding non-Roma villages, we see two groups possesing different power and strength. Yet what shapes the relative strength or weaknesses? A social group consists of individuals, but its strength depends on how the individuals cooperate, form networks and relationships, and agree on common goals. In other words, what kind of social capital does the group have?

The concept of social capital itself is difficult for interpretation. It seems that the first definition was set forth by Pierre Bourdieu (1985), who defines social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition." Coleman (1990) puts forward a more straightforward definition. He describes social capital as "social–structural resources used by individuals to achieve certain ends".

Putnam *et al.* (1993) came up with the idea of social capital evolution. While he defines social capital as "features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions," he makes an important distinction between "virtuous circles" and "vicious circles". In cases of high levels of social capital and trust, social capital tends to regenerate itself increasingly, while the reverse holds for societies that start out from a low level of social capital.

The situation in eastern Slovakia villages with Roma shantytowns illustrates that relative power and influence on the local level is shaped by weaker social capital of Roma ethnic minority, which is not able to compete vis-à-vis the stronger social capital of the majority and inevitably become losers in competition for natural resources (e.g., clean and safe environment for settlements). Obviously, understanding why certain networks and individuals are more privileged than the others is far more complex. Development is not an irreversible path dependent process. The situation of social groups is not static and different global, nation-state, and local pressures and influences shape their social capital in positive or negative ways.

In her analyses of poor urban communities in the United States, Carol Stack (1974) described how everyday survival in these communities depends on close interaction with kin and friends in the same situation. Some of her conclusions may be applied on the Roma situation in eastern Slovakia. The ties and survival strategies utilized and applied by Roma do not reach beyond the place they inhabit, thus depriving their inhabitants of sources of information about opportunities and possibilities elsewhere and ways to attain them. In this case, social groups block their own opportunities and chances. However, even if they wanted to break the barriers, other social groups are often deploying their social capital to prevent other (usually weaker) groups access to resources and/or opportunities. This is the case of colliding economic interests, discrimination and competition over the natural resources in the villages with Roma shantytowns.

Building on Bourdieu's (1985) definition of social capital, in eastern Slovakian villages there are two separated durable networks of more or less institutionalized relationships of mutual acquaintance or recognition, which compete with each other for resources and recognition. These two separated social groups living side by side share the same space but live on "different planets" with minimal knowledge of each other. Social capitals of the Roma and non-Roma have developed over the years and are daily strengthened, maintained or weakened by various influences of governmental policies, development programs of NGOs and many other factors contributing to this dynamic process. However, when it comes to the decision making on the local level, a stronger group (i.e., non-Roma) may mobilize its social capital and make (or influence) decisions in the way which is most beneficial for them, while it may prove to be discriminatory to the others (i.e., Roma). This could be a case of selection of land for newcomers' settlements, or agreements where the village builds a new landfill.

8.3.5. "Beyond the pale" construction

Once you have space inhabited by Roma it becomes a place (in the eyes of the majority, i.e., decision makers) unsuitable for any development plan or project. On the contrary, it becomes an area for the allocation of problematic projects and activities. Once the Roma shantytowns are set up, the area may turn out to become a place for environmentally problematic management practices (e.g., the location of a new landfill in close proximity to Roma

settlements). Parts of villages inhabited by Roma are considered to be "lost" for any meaningful investment and the local council is well aware of the fact that Roma, as the least powerful group on the local level, will not generate sufficient pressure to prevent this type of investment.

The area inhabited by Roma in the villages' territory may start to be constructed by the majority as a "lost ground" or territory beyond the pale. The expression *beyond the pale*, referred in history to various defended enclosures of territory inside other countries. It meant territory outside the bounds of acceptable behavior. The idea behind it was that civilization stopped at the boundary of the pale and beyond lay those who were not under civilized control and whose behavior therefore was not that of civilized people[136].

Conceptualization of areas inhabited by Roma by the non-Roma as beyond the pale space is the outcome of the inequalities between them. Roma in shantytowns are the subject of decisions of a majority they have very limited power to influence. These could be decisions about new landfill construction and waste management when waste flow is sent from the non-Roma part of the village into the the Roma parts, land-use plans discriminatory to the Roma or decisions about the disconnection of shantytowns from public water supply systems.

8.3.6. Beyond the pale – the consequences

If the majority of non-Roma conceptualizes Roma shantytowns as beyond the pale, it means that the space can be (for instance) used for construction of landfills. It may be used for throwing out trash and is considered to be the part of village territory where the village may place any activity with troublesome impacts. This is the case of Svinia and the construction of the landfill for supermarkets from the nearby city of Prešov. The village and the investor did choose the landfill area next to the Roma shantytown. In the case of Rudňany, trash from the village is regularly dumped in close proximity to the Roma settlement at Pätorackė. Once you construct the space beyond the pale it is an area excluded from normal treatment. Cases like Rudňany, Svinia, and others, where is more difficult to investigate what was first – the

[136] See for instance Michael Quinion' account on history of the term at http://www.worldwidewords.org/qa/qa-pal2.htm [Consulted 16 June 2006].

shantytown or landfill in the close proximity (e.g., Hermanovce) – confirm the danger of the approach. Beyond the pale may have multiple impacts on the people and the environment:

- Increase of the environmental stress – besides "old" environmental threat (e.g., contaminated land) it brings new dangers (e.g., waste management);
- Reinforcement of the impact – floods may increase danger of chemicals from landfills;
- Minimal standards – weaker communities can not generate substantial pressure on the investors and they can "afford" minimal required standards or to omit mitigating measures;
- Culmination of social, economic and health impacts on the affected population.

Once a shantytown is established with marginalized poeople concentrated in one place, and barriers between the majority and minority population are created, the environment may become yet another stressing factor for the affected communities. Beyond-the-pale syndrome may appear, and it is difficult for the people endangered by the unequal distribution of environmental harms to affect its formation.

The flow of influence from the beyond-the-pale space to the area of the majority in villages is very limited. Roma may generate certain pressures on the decision-making process (mostly if they are supported by external agents like NGOs), but their influence is very circumscribed. Moreover, a place once constructed as beyond the pale is in the vicious circle of the deterioration of social, economic, and environmental conditions. The division between spaces occupied by Roma and non-Roma may have a tendency to deepen instead of narrowing. People living there will be further exposed to environmental threats and their access to environmental benefits may be further diminished. Communities may find themselves surrounded by waste from cities or exposed to the construction of problematic facilities.

8.4. COMPETITION AND CONFLICT – A TALE OF TWO COMMUNITIES AND ONE VILLAGE

Data from the 1999 European Values Studies show that almost four-fifths of the general population in Slovakia (77.2%) would mind if Roma moved into their neighborhood[137]. According to the 1995 survey by the Public Opinion Research Institute, as many as 66% of the respondents agreed that Roma should live in separate settlements[138].

One of the outcomes of the research on environmental benefits and harm in Roma communities of eastern Slovakia is that we can not analyze aspects and roots of injustice against the background of the village as a community, but we have to rather focus on two separate and divided groups. Although non-Roma are internally divided over individual interests in substantial issues (e.g., which land should be allocated for Roma housing projects in Hermanovce or Letanovce) they can formulate and enforce their group interests. The Roma as an internally fragmented ethnic group are usually less organized and less able to articulate their needs (e.g., to notice the latent inability to unite behind their own candidates for municipal council elections); they do not possess capital, land, and entitlements to natural resources.

There is a stronger group of the non-Roma majority and a weaker ethnic group of Roma minority. There is very limited contact between these two groups and minimal interactions among them (limited practically to the implementation of the decisions approved by the majority). The mayor and village council members are usually the only non-Roma in regular contact with Roma and this is mainly due to their work obligations. The interactions between the two groups can be described in terms of competition and conflict.

[137] European Values Studies – a large-scale, cross-national and longitudinal research program done by the Tilburg University. Available at: http://www.jdsurvey.net/web/evs1.htm [Consulted 29 August 2006].
[138] Quoted in Vagac and Haulikova 2003.

8.4.1. Social groups – strengthening and weakening factors

The question that arises is why do some social or ethnic groups (i.e., Roma) experience weaker potentials? Lin (2000) suggests that this inequality occurs when a certain group clusters around relatively disadvantageous socioeconomic positions, and the general tendency is for individuals to associate with those of a similar group or socioeconomic characteristics. In other words, depending on the process of historical and institutional constructions, opportunities have been unequally distributed to different groups defined by race, origin, class or religion. The general tendency for individuals is to interact and group with others with similar characteristics. This is the case especially when boundaries between groups are clearly defined and difficult to cross.

The more privileged groups in power structures enjoy better access to information and resources and have influence in the decision-making process and selection of people for elected or nominated positions. In contrast, members of the marginalized groups share a relatively restricted scope of resources and influence. Table 16 lists some of the factors contributing to the strengthening or weakening of individual groups. The situation of people is not static and different global, nation-state, and local pressures and influences shape their relative strength in positive or negative ways. The situation is formed by socio-economic conditions and has been constantly re-shaped by multi-level interactions among stakeholders. There is not one single pattern of development – the situation in settlements differs from case to case. However, certain general trends and tendencies prevail.

Table 16. Groups' strengthening and weakening factors

FACTORS	Economic	Social status	Cultural assets	Environmental conditions
Strengthening	►Wealth ►Economic growth ►Economic cohesion policies and redistribution in society ►Pro-job creation policies	►Social inclusion ►Recognition ►External agencies' assistance ►Positive affirmation ►Rule of law	►Strong cultural identity ►Low birth rate ►Demographic pattern	►Entitlements to natural resources ►Access to natural resources ►Healthy environment
Weakening	►Economic decline followed by poverty ►Social spending cuts ►Regional disparities ►Inequality in labor market ►Corruption	►Social exclusion ►Internal fragmentation ►Disempowerement	►Assimilation ►Prejudices, racial discrimination and unequal treatment ►High birth rate	►Natural disasters ►Adverse environment ►Resource scarcity ►Disease

Poverty, lack of entitlements and ethnic segregation have led to the present situation of two separated and uneven groups existing side by side, but having minimal connections between them. The shantytowns can be described as places of social anomie. The coexistence of Roma with non-Roma has led to undermining of the Roma's traditional values through cultural contact, but they were not replaced by clear, new societal norms and values.

Roma do not possess the resources and political power to prevent exclusion from the village and this exclusion has many consequences. Inability to influence the decision-making process has contributed to the situation where their access to water is comparatively worse than that of their neighbors. Public funds have not been used to construct water supplies for shantytowns. Anti-flood measures are insufficient and landscape management increases the danger of floods. However, most of all, the weakness of the Roma on the local level is indicated by the places selected by the majority non-Roma as their localities for settlements.

8.4.2. Environmental injustice as the outcome of competition

In his general theory of competition, Cooley claims that competition is a universal aspect of life, that it is neither good nor bad in itself but may be either, dependent upon its relation to the larger social order and the goals of the competition (Cooley 1894; Bodenhafer 1930). Cooley sees competition more in the neutral form (it can be positive as well as negative

depending on circumstances and the broader framework of the society where the competition takes place). Cases of environmental injustice in eastern Slovakian villages are primarily an outcome of competition between Roma and non-Roma, where racial discrimination, prejudices, class and business interests are at stake.

The aim of the non-Roma is to maintain the existing equilibrium of power, whereby they dominate the villages economically, socially and politically. Natural resources are the key subject of the competition, and the dominating group is trying to maintain and possibly expand control of them in a way which Asad (2002) calls "the systematic compulsion to expand one's control of resources" (as in a self-regulating capitalist system). The dominating group keeps control over the productive and economically important land, and when the economic benefits from a particular piece of land change (see the case of Letnovce and the changed value of formerly less productive agricultural land to a newly interesting place for tourism), they expand control and try to move the weaker group to a new place.

It other words, natural and environmental factors have played important roles in the distribution of land and settlement rights, while the strength or weakness of the individual groups is crucial in this distribution. I found no evidence that the environmentally dangerous places were selected by the majority for the minority as a way to exterminate them or make them suffer on purpose. It is rather economic and social factors that have played the key role, while impacts of the exposure to environmental harm were (are) insufficiently understood by both sides (the majority and the minority) due to a lack of information and low awareness about different impacts of exposures to potential environmental dangers.

8.4.3. Environmental justice research and addressing the cases on the local level

Examples of environmental injustice and the resulting implications naturally lead to the question of what the potential implications of framing the cases of unequal distribution as environmental injustice would be. In the theoretical framework of the dissertation I described differentiated approaches to environmental justice in the US and in the UK.

Environmental justice struggles in the US are often led by people with no political organizing or activist experience before a particular toxic struggle. The activities are usually led by local residents (often women) — the cases are framed as a local threat to their families, their health, and their communities. The target is usually narrowed to simple blocking of a problematic project or remediation of old environmental liabilities.

Cases of community struggles for equal treatment in the distribution of environmental harm in the UK are led by professional environmental organizations with highly educated staff and international expertise. They look at forms, other than toxic waste, of unequal exposure to harm or access to environmental benefits, and the target is also to change macro-conditions (e.g., economic and social policies) enabling discrimination.

Given the present situation in the divided villages and social capital of the competing groups, I consider the UK approach closer to the conditions in eastern Slovakia. It is important to develop the connection between grassroots activism and science in addressing the case of environmental injustice. But in the situation where the grassroots is weak, outside assistance is crucial. Environmental justice research should therefore build more on the UK experience and, through the network of professional environmental (and possibly other) organizations, build connections to academia and research. It should feed data from the environmental justice research back to the affected communities and use them in negotiations and policy work on the micro- and macro-level.

8.5. CHAPTER SUMMARY

Outcomes of the research on environmental justice in the eastern Slovakia have been summarized here, and the cases identified, mapped, and analyzed. Four main patterns of environmental injustice were defined and described. However, they do not provide a definitive list of the patterns of inequalities in the distribution of environmental benefits and harm. There may be others which were not represented or identified in the sample of 35 Roma settlements included in this research.

Although different in form and scope, they represent patterns that have several common features. They are the outcome of the social, ethnic and last but not least economic division in villages, where the location of settlements, management of natural resources and waste is an outcome of competition for space and economic benefits from the management of environmental resources. The roots of environmental injustice are seen in the quest for dominance in the villages when two (unequally powerful) groups compete for resources (including land for settlements). The Roma, as a distinct and visible ethnic group, are gradually becoming less important for the villages' economy and are the objects of racial prejudices and racism. The outcome is that the weaker group ends up settled in places not commercially interesting for the majority and as distant from the main village as possible.

The places allocated for Roma shantytowns then have the tendency to develop into the beyond-the-pale locations where any activity not wanted by the majority in the village is allowed. Once a space beyond the pale is constructed, the place is more prone to being impacted by unequal treatment in the distribution of environmental benefits and harm (e.g., in the form of waste management practices). Inequalities in the competition of the two groups, Roma and non-Roma, play an important role in the development of the patterns and in the construction of beyond-the-pale spaces. However, the competition does not take place in a vacuum and economic, social and environmental policies, programmes and projects provide a background for the situation on the macro-level of villages.

In the next chapter I discuss policy options for addressing cases and the roots of environmental injustice. They are based on the premises that to effectively address the present cases and eliminate conditions for development of new ones we need to modify the general (macro) frame of policies. At the same time we must provide extensive assistance to both the majority and minority populations.

CHAPTER 9. *RECCOMMENDATIONS AND POLICY OPTIONS*

9.1. INTRODUCTION

Cases, patterns, impacts and potential causes of environmental injustice were described and analyzed in the previous chapters. I discussed competition over natural resources and economic and social relations between Roma and non-Roma as the key factors contributing to the unequal exposure to environmental threats. I illustrated how the Roma, as the disadvantaged ethnic group vis-à-vis the non-Roma majority, ended up in settlements with problematic environmental conditions and how the "beyond the pale" syndrome may develop in these places.

In this chapter I take the different approach. I discuss how to address the various economic, social, and environmental factors' contribution to environmental injustice and suggest options for addressing present (and preventing future) inequalities in the distribution of environmental benefits and harm. The focus is on ways to challenge the broader economic and social environment that enables cases of unequal treatment and to look for alternatives that challenge the unequal distribution of environmental benefits and harm on the local level.

"Environmental problems are first and foremost political because they affect social groups differentially and impose different types of cost and burden" (Grant 2001; Grant *et al.* 2000). The key concern is what changes are to be made to address the different issues, and how to shift the current pattern of policies and practices contributing to the origins (and sometimes preventing the addressing) of cases of environmental injustice. Based on the analyses of different macro- and micro-factors contributing to the present situation, I outline potential policy and management changes I consider to be important for the improvement of the environmental conditions in Roma shantytowns. The approach selected is to discuss synergies between environmental protection, natural resource management, and social and economic development.

There is no simple universal solution to the problematic situation of people living in the shantytowns of eastern Slovakia. However, there are possibilities for how to create an enabling environment for such changes. Empowered, entitled, and stronger Roma communities, able to formulate their interests and bring them into the decision-making processes, is a vision expressed many times by Roma themselves and by people working with the Roma. The environment may play a significant role in this respect. It may serve as an argument for mobilization and a search for solutions in the cases of environmental injustice in the cases of Rudňany and the Upper Svinka Watershed. The concept and evidence of environmental injustice may provide an additional dimension to the struggle for better living conditions in the communities appraised in the sample of 30 villages in this research, and serve as an inspiration for others facing similar problems.

The environment is the problem, but it is also part of the solution. It may play a role as a source of employment opportunities, income, and a place of collaboration between Roma and non-Roma. It may provide badly needed opportunities for the development of individual skills and foster cooperation among the social groups through sustainable utilization and management of natural resources. We can not address environmental injustice without addressing the economic and social situation in the shantytowns and access to justice. Conversely, we can not address the social and economic situation of the people without addressing their environmental problems. These issues are not parallel processes but different aspects of the same process. It is a process of changing the present competition and conflict between the two groups into cooperation, while utilizing opportunities provided by the environment.

9.1.1. Two scenarios and environmental justice

The economic and social competition over natural resources, ethnic discrimination and a quest for dominance in the villages has led to cases of environmental injustice. The question that arises is whether the competition and resulting problematic environmental conditions for disadvantaged groups (together with other social and economic motives) will lead to conflict or to a new form of power relations in the villages. I will now outline two possible scenarios for the future.

9.1.1.1. Scenario 1: from competition to conflict

Roma and non-Roma live in close proximity and share the same environmental niche. This proximity coupled with limited resources may further increase tension. Conflict in villages with a Roma minority would probably not take the character of open clashes. The rebellion and looting which took place after the cuts in social spending in early 2004 are the only example to date of open conflict and violence between the majority and minority[139]. It was an outside force (i.e., the police and army), not the people from the villages who suppressed the rebellion, but the interpretation is that they acted to protect the non-Roma majority in the villages and the state generally. This revealed that the state apparatus, supported by public opinion in the country, is willing to deploy force to suppress any such attempts. This strategy may (in a short run) address the situation, but it is not addressing the roots of the problem.

The deteriorating social and economic situation will, together with increasing awareness about environmental dangers in the shantytowns, lead to latent conflicts between the Roma and non-Roma. The tendency will be enhanced by growing social insecurity among the non-Roma due to the deterioration of their social and economic situation as the outcome of the overall situation in the state, growing regional disparities and decreasing social spending. Remote rural areas will not attract significant investment and social and economic cohesion policies will fail. Roma will be increasingly prevented from secure tenure and entitlement over natural resources.

The state will effectively limit its involvement to limited social spending and demonstrations of force. Isolated attempts of external agencies (e.g. NGOs) will have a problem with sustainability and in the atmosphere of hostility from the side of the non-Roma, the Roma in the shantytowns will fall into deeper social anomie and distrust. This will lead to the further isolation of the two groups and a decrease of contact between them. The non-Roma majority will block or sabotage any attempt to address the Roma situation (including problems of

[139] The looting took place in two places included in the RRA sample: Trebišov and Trhovište. It did not happen in places covered by the two case studies in this research. According to interviewed experts, it was the work of NGOs and activists with the communities that helped to prevent this and the riots occurred mostly in places with limited or no outside assistance to Roma communities.

exposure to environmental risk)[140]. Roma shantytowns will develop into beyond-the-pale places with deteriorating environmental conditions.

9.1.1.2. Scenario 2: From competition to cooperation

General development policies and development programmes in the country will focus on pro-active approaches to the involvement of the groups in society through providing job opportunities and social stability for underdeveloped regions and marginalized people and communities. Through extensive outside assistance from governmental and non-governmental agencies, social, economic and environmental conditions in Roma shantytowns will improve vis-à-vis the improvement of the social situation of non-Roma. Secure tenure, property rights and entitlements over natural resources will be secured for the weaker ethnic group of Roma where possible.

With the assistance of the state, people from places endangered by adverse environmental conditions will be resettled in new social housing built on the principle of integration with the majority. Programmes and projects focused on both the minority and majority population in the villages will create an enabling environment for positive affirmation of the Roma, their involvement in the decision making and management of the villages (including management of natural resources). The state and external agencies will secure adequate access of Roma to the new opportunities. Environmental protection, landscape management and green technologies will add to the region's income opportunities and provide common ground for cooperation between the minority and majority. Enhancement, empowerment and involvement of Roma will prevent any future cases of environmental injustice or beyond-the-pale syndrome.

[140] See case study of Svinia village where non-Roma effectively blocked a Roma housing project.

9.1.2. Managing the change

These two scenarios provide examples of positive and negative alternatives of development. While the situation in many villages resembles scenario 1 more than 2, there are many positive examples of attempts to address the adverse situation in the Roma shantytowns. The construction of new houses in Rudňany provided houses for some families and even with the objection to the resettlement of the Roma community in Letanovce the fact is that the social and environmental conditions have improved for people who were resettled from the shantytowns.

However, new housing projects alone will not address the problem of competition by developing new forms of cooperation, but may rather lead to indifference and further segregation. Resettlement of people will not solve their social and economic problems in a society providing limited opportunities for employment and development. It is therefore important to see the problem of Roma shantytowns and conflicts over natural recourses in the context of the general social, economic, and environmental policies and local (micro-level) factors forming the daily life of the majority as well as the minority population. This is very important for the formulation of policies, programmes, and projects contributing to the development of the second scenario. Some steps are relatively easier and faster to do (or they need to be done immediately in shantytowns with extreme conditions); others would require a longer time, preparation, and complicated implementation. The suggestions and recommendations provided in the following section are therefore divided into short-term measures (where immediate action is needed for people endangered by environmental conditions), and long-term measures to prevent the creation of environmental injustice patterns by changing the macro- and micro-level of policies, programmes, and projects to contribute to a general environment enabling cooperation in the villages.

9.2. SHORT-TERM MEASURES – ADDRESSING THE PROBLEM OF ENVIRONMENTAL INJUSTICE AND ITS VICTIMS

Every day there is a danger that some of the houses in Rudňany may disappear in a landslide or that some of the Roma children in Hermanovce will get sick because of the water quality. Reassessment of the budget priorities at the central (state) and local (municipal) levels is therefore needed. The people need immediate support with resettlement and/or with preventive measures decreasing the environmental risks they face. Construction of water pipelines and access to potable water should be supported by the central government and EU funds may play an important role in this. There are several measures which should be carried out urgently:

- Re-settle people from the settlements exposed to toxic substances and/or floods (i.e., Pätoracké and Zabíjanec in Rudňany, Hermanovce, Svinia, Uzovske Pekľany, Petrova,. Chimianske Jakubovany and Markovce);
- Address the creation of the beyond-the-pale syndrome through better monitoring of waste management practices and better involvement of the affected people in decision making (i.e., Trebišov, Bystré, Rudňany-Pataracke, Jarovnice, Hermanovce and Svinia);
- Begin environmental monitoring through the government and its agencies in all settlements and identify those that are problematic from an environmental perspective;
- Begin or accelerate construction of new water supply and sewage infrastructure focusing specifically on settlements with poor water quality or limited access to potable water;
- Continue construction of public housing, taking into consideration the social status of the inhabitants and looking for alternative housing projects involving energy-efficient technologies for construction and heating.

The situation in settlements endangered by adverse environmental conditions should take priority on the agenda, and the government – in cooperation with municipalities – should play the key role in this respect. Environmental conditions in the settlements identified through the research (and possibly in many others) can be described as an emergency situation that

requires immediate action. The allocation of financial resources for the construction of public housing for people identified in this research as directly endangered by toxic exposure would not cost more than a kilometer of new highway[141].

Access to water may be solved by technical solutions (e.g., construction of a water supply), but it is possible that in a few years the same people (unemployed and marginalized as they are now) will lose access to the water again. The reason is simple. Water companies will disconnect them since they will not be able to pay for the water.[142] Environmental injustice is an outcome of complicated processes lasting for decades or even centuries, and it is therefore naïve to think that fast solutions may bring lasting results if they are not part of broader concepts and policies for addressing the problem of Roma shantytowns in a complex way (e.g., resettlement without integration may contribute to the creation of new shantytowns, as in fact happened in Rudňany). Policies and measures focused on longer term perspectives should therefore support immediate steps for addressing environmental injustice.

9.3. ADDRESSING THE ROOTS OF ENVIRONMENTAL INJUSTICE – LONGER TERM OPPORTUNITIES

In this section I discuss possible approaches to addressing the problem of environmental justice through social integration of the marginalized groups and their empowerment on the local level. The focus is on natural resource utilization and the environmental management as the opportunities to meet these goals. The discussion is modeled around nine recommended shifts in approach:

1. From general reforms of the economic framework and social assistance to targeted measures and approaches and a stronger state for local empowering action;
2. From homeless strangers to stakeholders;

[141] One kilometer of highway in Slovakia costs EUR 12.5 million. For resettlement of the remaining families from Rudňany-Patoracke, the local municipality would need approximately EUR 110,000. For the cost of the highways see: http://www.euractiv.sk/cl/119/2776/Slovensko-ma-najdrahsie-dialnice [Consulted 18 February 2005].

[142] This was the case of Roma in Trebisov in the summer of 2004, in Košice in 2005 and 2006 and in many other Roma settlements.

3. From “marginalized people as part of the problem” to “marginalized people as part of the solution”;
4. From the environment as a source of ad hoc income to the environment as an income and employment generator;
5. From “planning for the people” to “planning with the people”;
6. From competition to collaboration and reinforcing the majority and minority ties;
7. From ad hoc projects to systematic work with the marginalized communities;
8. From separate tracks of poverty alleviation and environmental protection to addressing poverty through environmental management and addressing environmental injustice through poverty alleviation;
9. From addressing symptoms of environmental injustice to addressing the roots of unequal treatment

The shifts are summarized in Figure 23 and are used as the leitmotiv in the discussion of the longer term measures needed for addressing the roots of environmental injustice. The environment is not discussed here as the primary factor, but rather as an opportunity for development of both the Roma and non-Roma communities to build mutual cooperation and provide employment opportunities.

Table 17. Recommended shifts in approaches to development of marginalized communities endangered by environmental injustice

PRESENT SYNDROMES	SHIFT REQUIRED	DESIRABLE OUTCOMES
■ Formal and legal declaration of policy/legal principles for human rights and governance not sufficient without effective system for implementation; ■ Decentralization of power without empowerment of the marginalized people and effective control mechanisms; ■ Cuts in social assistance (especially sensitive for families with more children) and more regulated access to unemployment registration (including penalties for "black labor" and for not accepting a job offer) may bring some people back to employment. But it will not do the same in the case of the absence of employment opportunities and structural discrimination on the job market (i.e., lack of labor opportunities for low-skilled workers and racial discrimination);	**From general reforms of the economic framework and social assistance to targeted measures and approaches and a stronger state for local empowering action**	■ Guided, financially supported, and gradual decentralization based on broad awareness-raising campaigns, with control mechanisms controlled and managed by the central government; ■ Reconsideration of the basic principles of economic and social policies towards a better system of redistribution and support of social inclusion instead of exclusion; ■ Support for "soft" measures like education, capacity development, and skills building instead of focusing solely on infrastructure development ■ Positive affirmation as a temporary measure; ■ Using the EU concept of economic and social cohesion and leverage for development of best practices and approaches in Slovakia. ■ Implementation of EU environmental policies and development of stronger measures for nature protection and conservation based on broad involvement of stakeholders (including Roma);
■ Unsecured tenure, formal property rights and entitlements are often missing due to administrative barriers; ■ Public housing construction is a means for further segregation; ■ Exclusion of Roma from entitlements and subsequent management of the common pool of resources; ■ Roma as foreigners in villages excluded from participation and decision making;	**From homeless strangers to inhabitants and stakeholders**	■ Redefine property rights in unclear cases, especially when the land has been occupied by Roma for a long time; ■ Registration of houses in shantytowns (softer approach to problematic cases); ■ Support integration of Roma communities by tying funds for housing construction to integration measures; ■ Enhance entitlement of Roma over the natural resources through their involvement in environmental management; ■ Develop and promote alternative forms of ownership and entitlements;
■ Roma settlement is seen by the majority as a problem to be solved through technical measures (e.g., re-settlement); ■ Marginalized people are considered to be an obstacle in village development and the tendency is to remove them from the inner territories of the villages;	**From "marginalized people as part of the problem" to "marginalized people as part**	■ Support marginalized groups' involvement and development through the three stages of environmental management: hostility>ignorance>involvement, where the environment may provide a common ground for building mutual trust and understanding;

	of the solution"	■ Empowerment and capacity development of Roma for effective participation in decision making; ■ Building capacities of non-Roma for opening of the public space for the Roma minority and their social inclusion in the villages;
■ Economic reforms presently limit targeted policies (e.g., introduction of the "flat tax" erased previous tax incentives in the construction industry or renewable energy production); ■ Natural resources play the role of "buffer zone" mitigating impacts of the economic and social situation of the marginalized people in the Roma settlements through collection and trade of forest products; ■ Illegal exploitation of natural resources (e.g., illegal logging) creates tensions between the majority and minority;	**From the environment as a source of ad hoc income to the environment as an employment generator**	■ Governmental policies, tax incentives, and financial support schemes for the development of green jobs; ■ Eliminate conflicts and tensions over natural resource exploitation through environmental management, development of programmes in nature conservation and landscape management and their institutionalization involving both the minority and majority population; ■ Effective system of environmental education supporting social inclusion; ■ Involvement of people in the job market (e.g., in newly created green jobs) by enforcement of equal opportunities and temporary affirmation policies;
■ Plans and programs for local social/economic development and/or environmental management are often done by external experts without substantial participation of the affected communities and with virtually total exclusion of Roma in the planning and/or implementation process. ■ Roma are seen as "a problem" to be addressed through planning; ■ Goals and objectives of planning are dominated by the interests of the stronger group;	**From "planning for the people" to "planning with the people"**	■ Participatory planning for environmental management as an opportunity (e.g., Local Agenda 21, Local Environmental Action Programs, or Local Plans of Economic and Social Development) for involvement of the marginalized communities and people and breaking the barriers between communities; ■ EU social and economic cohesion policies as a generator of resources for projects based on participatory planning; ■ Planning as a tool for capacity development and enhancing cooperation between the majority and minority;
■ Two groups (Roma and non-Roma) are developing in almost total isolation from each other; ■ Institutional and economic power of non-Roma is used for the social exclusion of the Roma minority;	**From competition to collaboration and reinforcing the majority-minority ties**	■ Create programmes and projects addressing both the minority and majority ■ Focus on building synergies instead of deepening segregation;
■ Different projects are implemented by different NGOs with minimal communication of the results to the others; ■ Short life-spans of projects have no or limited follow-up; ■ Passive role of the government and limited involvement in the development of projects with international organizations and local NGOs; ■ Limited policies of reflecting lessons learned through development policies in systematic programmes of the government;	**From ad hoc projects to systematic work with the marginalized communities**	■ Improve information flow between different donors and different agencies working with marginalized communities (database of projects, institutionalized coordination); ■ Support through the state budget the most progressive and successful approaches piloted by NGOs; ■ Multiply best practices and lessons learned in a systematic way; ■ integrate environmental concerns (and environmental justice) into all relevant policies on the national level and financially support progressive approaches to address this issue;
■ Environment (and environmental justice) is a limiting factor		■ Every program for nature protection should start with a social

in communities' development, imposing addition burdens on their health, financial resources, and well-being; ■ Environmental protection and poverty alleviation programs are often done in parallel by different people and agencies and for different target groups;	**From separate tracks of poverty alleviation and environmental protection to addressing poverty through environmental management and addressing environmental injustice through poverty alleviation**	assessment of what it could potentially bring to marginalized communities. Every social policy or project could consider how to use the environment as a source of factors which may contribute to economic and social development; ■ Institutionalized coordination, better connections, contacts and interactions among people framing social, economic, and environmental policies and among people working with the marginalized communities on social and environmental projects;
■ Environmental conditions are seen more as a specific aspect of the shantytown situation, rather than a pattern of discrimination; ■ It is relatively easier to resettle people from environmentally problematic places than to prevent potential new cases and forms of unequal treatment; ■ Deteriorating social situation of the marginalized groups increases the potential for environmental injustice;	**From addressing symptoms of environmental injustice to addressing the roots of unequal treatment**	■ Complex addressing of the present cases of environmental injustice instead of simple resettlement; ■ Develop capacities and chances for Roma so that they will not find themselves in the same position of people bearing an unequal share of the adverse environmental burden. ■ Policies, programs and projects focused on overall improvements of living conditions with the environment as an integral part of them.

9.3.1. Addressing macro-level factors

The macro-level refers to the strategies, policies, and institutional arrangements operating on the nation-state level. They shape opportunities but also impose constraints on the village and community (micro-) level. As I discussed above, different impacts of economic and social reforms after the start of the transition in the beginning of the 1990s and the general framework of economic, social, and environmental policies is crucial for the creation of enabling conditions for environmental injustice on the local level.

On the other hand, the same policy framework (if well designed and reflecting micro-level conditions) may provide a background for changes in the vulnerability of different social and ethnic groups to the unequal distribution of environmental benefits and harm, and for addressing cases of unequal treatment. The three key areas where the macro-level plays an important role in supporting or weakening development of marginalized groups are: (i) Human rights and governance; (ii) Economic and social policies; and (iii) Environmental policies.

9.3.1.1. Human rights and governance

Slovakia (as part of the former Czechoslovakia) formally agreed and became signatory to international conventions on human rights (e.g., the UN Universal Declaration of Human Rights). A crucial problem remains in implementation. Despite the formal proclamations, human rights were systematically abused. After the 1990s transition, the situation with human rights significantly improved for the majority of the population. However, there are persistent problems with securing human rights of minorities and especially the Roma minority. Infringements are sometimes even more frequent than during the former regime[143]. One human rights abuse involves environmental justice.

[143] In August 2006 members of local councils in Vyšny Kazimír prohibited Roma from swimming at the local lake. Several local councils in eastern Slovkia (e.g., Spissky Stvrtok, Nagov) tried to limit free movement of Roma within the village.

Cases of environmental injustice are, to a great extent, outcomes of the competition between unequally strong social groups where the stronger one abuses the human rights of the weaker. Decentralization, which shifts a substantial amount of the decision-making power to the local level, may turn out to be a new tool in the competition. The main recommendations are to improve general awareness, legal consciousness about human rights and especially about their accountability and implementation among populations, to accompany decentralization in Slovakia with substantial control measures, and to promote affirmative action as a measure for involvement of the Roma in the society.

9.3.1.2. Economic and social policies

Economic and social policies are significant factors in increasing or decreasing the vulnerability of communities and access to environmental benefits and harm. The Slovak reforms (in respect to poverty alleviation) in the period of 1998 – 2005 were more-or-less built on three basic premises: (1) the increase in inequalities is normal and will decrease with economic growth[144]; (2) massive tax cuts and labor code reform focused on flexibility and decreasing social protection of employees as a barrier will help domestic companies and attract foreign companies, which will start growth and the growth will reduce poverty; and (3) decreased social assistance will push people back to employment and further accelerate economic growth (i.e, decreased time when the benefits from the growth will also reach those living in poverty).

As the result of this focus, the state administration was focused on decreasing public spending and social programmes and increasing direct and indirect subsidies for foreign companies. The deterioration of the economic situation (especially of the marginalized groups) was re-formulated as a temporary phenomenon. Whether (and if so, then how much) economic growth eliminates absolute poverty is a serious concern not limited to social scientists (Betancur and Gills 1993; Giddens 1993). Polarization and inequalities in Slovakia (besides increasing disparities among individuals) also have a regional character. The economic growth and social situation of marginalized groups and especially Roma is worsening and

regional disparities are growing[145]. However, as Kusa and Kvapilova (2004) point out, empirical evidence shows that poverty and social exclusion since the first half of 2004 (start-up of the radical reforms) has worsened among low-income households.

At the same time, poverty was interpreted by the mainstream think tanks and the government as individual failure and a reluctance to would find employment. The state government claimed that social assistance reform will "push" the people into the job market and foreign investors would provide job opportunities. They did not, however, take into account that these opportunities are open to very few people from the marginalized regions and communities, and that for many of them reform would only deepen their social exclusion[146].

The economic and social policies based on these three premises have directly influenced the situation of marginalized groups. The idea of diminishing social re-distribution may prove to be dangerous for the country in the long run. Neo-liberal critiques of the redistribution of the benefits from growth, based on premises that redistribution only creates assistance dependence, may prove to be false (George 1997; Lindert 2004). The welfare state was relatively successful in poverty alleviation and income equality promotion while maintaining economic growth. Based on his extensive studies of OECD economies, Lindert (2004) concluded that there is no evidence that transferring a larger share of GDP from taxpayers to transfer recipients has a negative correlation with either the level or the rate of growth of GDP per person. According to his work, the average correlation is essentially zero or even positive.

Restricted social policies leading to exclusion instead of inclusion and to worsening instead of improving the situation of marginalized groups endangers marginalized people. It undermines the social mobility of people, deteriorates their social situation and limits their opportunities

[144] The first premise (decrease of inequalities) is in line with Kuznetz theory. According to Kuznetz (1995), economic inequality increases during an economic takeoff, but inequality declines after economic growth reaches a certain level.

[145] Real wages decreased by 0.6% between 2002 and 2005. Regional disparities are growing and districts in central and eastern Slovakia have reached unemployment close to 30% (e.g. Rimavska Sobota 29.9%), while in the capital city, Bratislava, it is only 3.2%. Average salaries in Bratislava are 138% of the average compared to 75% in Prešov County. For more information see the Report of the Slovak Ministry of Social Affrais and Family: *Správa o súčasnom stave sociálno-ekonomickej úrovne v jednotlivých regiónoch Slovenska a pripravovaných opatreniach na odstraňovanie sociálno-ekonomických rozdielov v jednotlivých regiónoch do konca volebného obdobia* [Report on the present social-economic situation in the individual regions of Slovakia; upcoming measure to tackle socio-economic disparities in the regions until the next elections].

[146] While foreign investment is concentrated in the western part of the country, the most problematic shantytowns are in the esastern part. Moreover, the employment opportunities in newly built factories usually require at least secondary education.

to protect themselves against unequal treatment. Environmental injustice may be one of the possible outcomes of these factors. The main recommendations are therefore focused on the following areas: (i) Reconsider the basic principles of the economic and social policies towards a system of redistribution and support of social inclusion instead of exclusion; (ii) Support measures like education, capacity development and skills building instead of focusing solely on infrastructure development; and (iii) Use the EU concept of economic and social cohesion and leverage for development of best practices and approaches in Slovakia[147].

9.3.1.3. Environmental policies

Environmental policies and legislation are often attacked by critics as an obstacle to economic development and a bottleneck delaying or blocking growth[148]. On the other hand, environmentalists sometimes criticize environmental policies as "green-washing" since they rarely address the core of the environmental problems (e.g., current patterns of industrial production and consumption). Nevertheless, there is one aspect of these policies which is important for social development and thus addressing environmental injustice. It is the contribution of environmental policies to the improvement of the situation of marginalized people.

This aspect is more evident when we assess the contribution of the newly adopted *acquis* of the European Union in Slovakia. The country has been forced by the obligations arising from membership in the union to rapidly adopt and implement, among others, the Water Framework Directive, the Drinking Water Directive, the Urban Waste Waters Treatment Directive, the Nitrate Directive, and European waste policies[149]. All of them require a substantial amount of investment for implementation. Investment in the environmental infrastructure and implementation of the common environmental policy is supported throughout the EU territory by assistance from the structural and cohesion funds. In this way,

[147] See Filcak 2003.
[148] The Ministry of Economy of the Slovak Republic established a committee for re-assessment of the network of protected areas in Slovakia in 2004, based on the claim that the level of nature protection is above "international standards" and it effectively blocks development of the tourist industry in the country.
[149] For more information see Barnes and Barnes 1999.

the policy of economic cohesion is also helping to improve environmental standards and the quality of the environment in the regions lagging behind.

More developed countries have usually already invested in the environmental infrastructure and through their contribution to the structural and cohesion fund they support the introduction of the same standards across the European Union. The cohesion countries thus benefit from the environmental policy. These benefits can be in the form of health impacts, protection of natural resources or job creation.

Environmental protection measures tend to benefit employment. Environmental projects may bring jobs into the communities, and provide a forum for participation in society. A better environment may boost development of the tourist industry. The second important aspect is that fulfillment of water directives gradually enables some of the marginalized communities to have access to potable water and sanitation[150]. In this way, environmental policies provide an important macro-level factor for addressing some of the problems of marginalized communities and could be a positive factor in their development. Focusing on the implementation of the EU environmental *acquis* is therefore an important step forward in addressing the roots of environmental injustice and individual cases. The next step should be development of Slovakia's own (stricter and progressive) policy measures building on the European framework.

9.3.2. Stronger state for local empowering action

Agyeman and Evans (2004) claim that environmental justice may be viewed as having two distinct but inter-related dimensions. It is, predominantly at the local and activist level, a vocabulary for political opportunity, mobilization and action. At the same time, at the government level, it is a policy principle that no public action will disproportionately disadvantage any particular social or ethnic group.

These policy principles are very important. Cases of environmental injustice identified through the field research point to serious discrepancies between the formal legal framework

of human rights (e.g., a right to a healthy environment as declared by the Slovak Constitution) and their implementation. It is apparent (in the case of the marginalized communities), that the formal declaration of legal principles is insufficient for addressing the roots and effects of the unequal share of adverse environmental impacts. It is equally important to consider how the legal framework is used in concrete situations and what the principles are in its implementation.

The shift from "formal" rights to real ones requires good policy and a legislative framework on the state level and, most of all, their unbiased implementation. The state is often considered an obsolete player by mainstream media or NGO activists. It is defined as corrupt, bureaucratic, trouble-making and expensive. The popular opinion is that the decision making should go to the local level, which is considered moral and closer to the problems. I tend to disagree with the call for a "weaker" state and transfer of some of the powers to local levels. As Friedmann (1992) puts it: "Local empowering action requires a strong state".

The role of the state and its institutions is irreplaceable. Leaving the addressing of environmental injustice cases, their roots and the origins of unequal treatment to the (often) biased local municipalities with limited resources delays (or prevents) addressing the problem. It is unfair towards the people who live now in the present situation. It also further diminishes the chances of future generations for a decent life. The case of decentralization in Slovakia illustrates how striking the difference between legislative intentions and real implementation may be. Delegation of power to the local municipalities without control mechanisms and effective participation of the marginalized minorities (e.g., Roma) in the decision-making process have contributed to further exclusion and further marginalization on the local level.

The state must play a strong role in implementation of the legislation and in the creation of an enabling environment for minority involvement and protection. This may take the form of better control of law enforcement, capacity building and development of local actors, and supporting progressive approaches to the empowerment and involvement of marginalized communities. External agencies (e.g., NGOs and development agencies) may bring important energy, know-how, and co-financing, but they will fail to develop long-term effects if their

[150] Though there would still be the issue of whether people could afford to pay in the long run.

efforts are not harmonized and supported by governmental policies. The objective should be to support Roma communities with legal protection, development programmes and projects, while at the same time developing capacities of the communities to participate effectively in the management of their lives and enabling them to take part in decision making on the local level.

9.3.3. Environmentally friendly housing for social integration

The resettlement programmes could help integrate the Roma minority in the villages and prevent the beyond-the-pale syndrome by mutual cooperation and integration. It could also focus on the construction of ecologically sound houses utilizing environmentally friendly technologies and renewable energy for generating energy. However, as housing planning in Letanovce or Hermanovce illustrates, resettlement is sometimes seen as a way to further segregate Roma from the villages. The plan is to find new places as distant from the main village as possible. Fossil fuels or even electricity is planned for heating, while it is doubtful that the new tenants will be able to pay for these utilities. Poverty and lack of resources may even prevent Roma from moving into the new houses.

An example from Sečovce may serve as an illustration. The Roma settlement on the outskirts of the city provides housing in urban-ghetto style for approximately 1,000 Roma, of which 90% are unemployed and the total income of these families is on average about SKK 5,000 (approx. EUR 125) per month, including all social allowances and assistance checks. The municipality provided the families with 20 new flats in 2005, but the Roma refused to rent them, despite very bad conditions in their old houses. Utilities and rent in these new houses cost as much as SKK 5,000 per month. Paying for public housing would leave these families with practically no money.

The question is how to make public housing affordable for low income people; the environment may provide part of the solution. In 2004, the NGO Letanovsky Mlyn organized (within the community planning project) brainstorming among the Roma from Letanovce about how they envisioned their new houses. They invited architects and presented the results. The following discussion revealed very different perspectives on an optimal house. In the

original plan, the new public houses were planned to use electric energy for heating. This is not only problematic from an environmental perspective (electric heating is the most environmentally unfriendly utilization of energy), but it is also extremely expensive, and due to liberalization of market prices of electricity, heating will not be affordable for the Roma.

If Roma are moved into new houses with electric heating and they remain unemployed, the result could be that, sooner or later, they will return to their old houses. Paradoxically, new social reforms and liberalization of prices of energy and utilities will least impact most residents of the Roma shantytowns, who do not pay rent; share wells or a limited number of water taps; and use timber and waste for heating. The most significant effect it may have would be for those members of the communities who have been trying to assimilate into society in cities and villages, who are not able to pay anymore for increasing cost of utilities and are now pushed back to the shantytowns.

Simple resettlement of Roma affected by adverse environmental conditions is not a solution on its own. Resettlement should follow principles of social integration, instead of further segregation. Part of the solution could be careful energy planning in the housing construction and development of passive and energy-efficient houses heated, for instance, by biomass from local sources. Simple solar panels for water heating and biomass boilers could, besides cheap energy, provide additional construction and maintenance work opportunities for the people in Roma communities.

The problem is that local municipalities usually do not have information on alternative solutions and they prefer “traditional” approaches to housing construction. There is also no legal framework or conditions on the state aid which would support social integration through the housing. Implementation of socially integrating and environmentally friendly construction practices would require substantial efforts of NGOs, local and regional municipalities and, most of all, a firm legislative framework on the national level. The EU social cohesion policies, together with energy policies could be a strong driver in this respect, if coordinated with national, regional and local planning.

9.3.4. Entitlements enhancement

As the field research in the shantytowns revealed, Roma are rarely owners of productive land or forests. They are often excluded from management of common pool resources or natural resources managed by the state or municipalities. The majority does not consider them members of the wider community and they treat them as intruders or strangers in the villages.

One of the most important conditions for achieving long-term sustainable use of natural resources (and securing equal access to the resources) would therefore be in assuring the right of the poor to access to natural resources through enhancing property rights and entitlement. Property rights and/or entitlements define the foundations for resource utilization and management. The aim should be to involve the Roma population in society and enable them to co-manage and co-share responsibilities for the natural resources. This would contribute to the elimination of the present situation where Roma are not considered part of the community and where Roma do not feel any sense of responsibility for taking care of the surrounding natural environment, which is often considered to belong to the ‘’whites’’.

Roma houses and shantytowns are often on land owned by the state or municipality. In the process of transformation at the beginning of the 1990s, Roma were (due to the cost and complexity of the process) unable to gain property rights over the land they lived on[151]. This limits their possibility to sell or exchange this land. It has also diminished their chances for resettlement and leaves them “locked” in places where they are now. The government should give these people a second chance to formalize their ownership rights, but this time with the help of the state administration and external agencies.

There are several ways to enhance ownership rights and entitlements among marginalized communities. As an illustration, I take the latent conflict between Slovak National Park authorities and people from settlements surrounding some of these parks. Roma from the marginalized settlement of Letanovce live in the buffer zone of Slovensky Raj National Park. Their main source of energy for heating and cooking is firewood. The Romani are no longer

[151] See chapter 4.3.1: History of shantytowns in eastern Slovakia and ownership rights.

allowed to collect firewood in the forest, a right they enjoyed until the Slovak Government declared the area a national park[152].

Police patrolled the forests to stop Roma from collecting "kindling". These police patrols were later replaced by a "Roma civic guard" (*obcianska straz*) project supported by local NGOs and the park authorities. The idea is to involve Roma in the protecting the national park against illegal logging[153]. The Roma now have the opportunity to buy firewood from local authorities for a reasonable price. Without external intervention by the state and NGOs, the park might have ended up with irrecoverable environmental damage. Similar conflicts over the firewood are typical for most of the Roma settlements in the research sample.

Other approaches could be based on affirmative action and establishment of a quota for Roma employment in forest management, protected areas and natural parks' protection, and landscape management, which would enable Roma to manage and utilize an adequate part of the municipal and/or state lands. Property rights distribution and entitlement enhancment could create a solid base for the improvement of social conditions and decrease the level of dependency on social assistance policies. This change would benefit the Roma, but also contribute to the protection of natural resources.

The next step to entitlement broadening could be development and introduction of alternative forms of ownership. As Gatzweiler and Hagedorn (2001) point out, governments can encourage the evolution of different forms of ownership, including local institutions that govern the use of common pool resources, which are based on indigenous knowledge and local learning-by-doing. Institutions stemming from local knowledge and experience are more likely to respond to the needs of users and match the ecosystem structures with appropriate governance structures than institutions imposed from the outside. As a practical recommendation, the government (in collaboration with development agencies and local NGOs) could support the set-up of cooperatives supported by marketing associations. The cooperatives could accumulate funds (with the help of the state and/or microcredits

[152] It has been a protected area since 1964 and a national park since 1988.
[153] For more information see, for instance, articles of Polansky from 1997: *The Gypsy Genocide.* The Patrin Web Journal. Available at:
http://www.geocities.com/Paris/5121/bigissue.htm [Visited on April 12, 2003] or the article from Repciak from 2002: *Slovenský raj budú opät strážit Rómovia z Letanoviec* [Slovensky Raj will
be protected by Roma from Letanovce]. Available at web page of Roma Press Agency:

programmes), invest in tools and equipment and start up small-scale business built on local opportunities provided by the environment.

9.3.5. Environmental justice and community recognition

9.3.5.1. The people as the problem and as the solution

People in marginalized settlements need a chance to develop their capacities and manage their own lives. As the joint report of the World Bank on *Linking Poverty Reduction and Environmental Management* concludes, first and foremost, poor people must be seen as a part of the solution rather than a part of the problem (WB 2002a). Poor people living in rural areas have more direct connections with the surrounding environment than the non-poor in cities. They have a strong interest in protecting and managing rather then destroying their physical surroundings – provided they have certain entitlements over the natural resources, and possess capacities, knowledge, know-how and access to decision-making.

Flood prevention in the Upper Svinka Watershed illustrates two different approaches to the problem and to the people. The present approach is to address the problem of marginalized people exposed to floods through building concrete walls, deepening the riverbed and constructing expensive anti-flood measures. An alternative approach could be based on involvement of the people in managing the stream. It would emphasize landscape management with labor-intensive anti-flood measures based on increasing the land's natural retention capacity. These measures have the potential to be equally effective in flood prevention (WCD 2000; McCully 2001; Gayer *et al*. 2003). They could provide additional benefits to marginalized communities in the form of employment, capacity building, and empowerment.

Yet this change in attitudes would require seeing "the Roma problem" in a broader perspective and would demand holistic approaches to the ways infrastructure is built, public money is spent, and the community is managed. The objective would be to involve

http://www.rpa.sk/clanok.aspx?o=zc&n=304&l=sk [Visited on April 11, 2003].

community development as the crosscutting issue in each and every decision of governance. Waste management in a village may be seen as a burden and cost for the community, but it could also be seen as an employment generator and opportunity for creating new networks between the majority and minority.

Making the marginalized communities part of the solution would require empowerment of the people from the bottom up through development of their capacities, while at the same time using any opportunity for their involvement in the management and development of the community. It is not enough to develop capacities of the people if they do not see a chance for employment, education, and a decent life. It is not enough to create a space for the people if they do not have at least basic capacities for involvement.

9.3.5.2. Environmental and development planning as tools

There are various approaches to community planning that involve the environmental dimension. Local Agenda 21 or Local Environmental Action Programmes are the most popular in Slovakia[154]. These tools have been implemented in partnerships between regional and national NGOs and the government on different levels. The 2004 accession to the EU made community planning more attractive for municipalities and villages, since it is essential for grant applications for the cohesion funds. Many municipalities started with development of *Local Plans of Economic and Social Development.*[155]

Although these plans are not primarily focused on the environment, they contain a strong environmental dimension and provide space for policy integration. Community planning is an opportunity for involvement of marginalized groups in decision making and addressing their problems. However, this is rather problematic when it comes to the involvement of Roma. Social exclusion from the village is a barrier for participatory and sustainable planning on the community level. Attempts to embrace environmental sustainability with social and economic aspects of development are increasingly popular in the region and in Slovakia, but even so,

[154] LA 21 and LEAP are approaches which have also been successfully implemented in Eastern Europe. For more information on LA 21: www.undp.sk/index.cfm?module=RSC&page=EnvG. For information on LEAP see www.rec.org/REC/Programs/LocalInitiatives/LEAP/Default.html [Consulted 5 May 2004].
[155] In Slovak: *Plan hospodarskeho a socialneho rozvoja.*

marginalized groups rarely take part in this and are more treated as a special point in plans developed by others. On the other hand, the capacity of Roma from segregated shantytowns to formulate and lobby for their interest is rather limited. The Roma communities often struggle to agree on people who should represent them (see the case study of Rudňany and their inability to vote for their own candidates in local elections).

People impacted by environmental injustice and by inequalities need to be part of the planning process, instead of being in the passive position of recipients of the plans. Community planning could provide vision and guidelines for addressing the roots, causes, and effects of environmental injustice. It is important to generate concentrated efforts of relevant stakeholders (including its victims) to meet this goal. However, it would require substantial capacity development of the Roma minority and intensive outside assistance to the community leaders.

The central government should require the involvement of marginalized groups (e.g., Roma) in the preparation of strategic documents which will serve as the basis for the distribution of governmental and the EU funds and subsidies. Local, national, and international NGOs and development agencies could help municipalities with training Roma and developing their capacities for active participation in the planning process.

9.3.6. Green employment as a key opportunity

As I described in the case studies, employment of the people from marginalized communities is a central theme in their social development, and thus (indirectly) in tackling cases of environmental injustice through strengthening the disadvantaged group. It is the most basic condition for building their dignity, providing them with income and opportunities for a decent life. The environment and natural resources may become an important source of employement, provided they are created in line with sustainable development principles. The employment strategies should focus on synergies between environmental protection, exploitation of natural resources and poverty alleviation.

Green jobs are defined here as employment opportunities in environmental protection, management of natural resources, and in the introduction of environmental technologies which have neutral or positive impacts on natural resources' conservation and nature protection. The key challenge would be to change the environment into a legal and sustainable source of work and income opportunities. Three factors are relevant in this respect: (i) Opportunities in rural areas with a Roma population; (ii) The role of the state in supporting employment generation; and (iii) Institutional backup of the marginalized peoples' involvement in the job market.

9.3.6.1. Opportunities in the rural areas with Roma populations

Resource management (e.g., in landscape management or management of protected areas), industry and agriculture (e.g., energy efficiency, production of energy from renewable resources or organic farming) may generate job opportunities and contribute to local development, especially in backward regions[156]. Management and implementation of anti-flood measures may provide other opportunities for the marginalized people in Roma communities. Alternatives are already available. An interview with KM, an NGO project manager, supports the point:

> We did a pilot project here [in eastern Slovakia] where we just made terrain drainage and influenced retention and absorption capacities of slopes above the rivers. The costs are minimal and you can involve many unemployed people from the villages. Floods are prevented there much better than in the Svinka river area, where they created concrete toboggans for the water which later floods areas downstream. These guys [government and firms] probably want to pave the rivers from here to the Black Sea. It is huge business for them.

There is growing evidence and examples that environmental protection and shifts in production and consumption patterns may bring higher employment and opportunities for

[156] According to the 2004 World Wildlife Fund study: *Ending Wasteful Energy Use in Central and Eastern Europe,* in Slovakia selected energy efficiency measures alone could create up to 10,000 new jobs, many of them for low-skilled workers.

community development[157]. Sectors of the economy with the potential to generate employment opportunities are summarized in Table 17.

Table 18. Environmental sectors comprising an eco-market with employment opportunities

Eco-sector of the economy	Sub-Sector
Pollution Management*	Air pollution Control
	Waste Water Treatment
	Waste Management
	Remediation and Clean up of Soil & Groundwater
	Noise and Vibration Control
	Environmental Monitoring & Instrumentation
	Environmental Research & Development
	Public Environmental Administration
	Private Environmental Management
Resource Management	Nature Protection
	Landscape Management & Anti-Flood Protection
	Water Supply
	Materials Recycling
Energy Management	Energy Efficiency
	Renewable Energy
Agriculture and Farming	Organic Agriculture
	Agro-tourism
Tourist Industry	Soft and Eco-tourism

*Data from ECOTEC 2001 are used for this section.

According to an ECOTEC study (2001) direct employment in the EU in eco-industries amounts to over 2 million jobs – around 1.5 million jobs for pollution management and 650,000 for resource management. The total employment generated by the demand for environmental goods and services is at least 2.6 million jobs (the high end estimation is about 4 million) taking into account the (first round) indirect effects[158] on the rest of the economy.

[157] See, for instance, 1998 European Council Employment Guidelines [Council Resolution of 15.12.1997], highlighting the need to exploit fully the job creation potential in new activities such as those in the environment sector and to reduce the tax burden on labour, e.g. by shifting the tax to energy and environmental pollutants. Another example is: *Scotland: Towards a Green Jobs Strategy - Opportunities for Business Consultation.* Available at: http://www.scotland.gov.uk/consultations/environment/tgjsc-00.asp [Consulted 10 January 2006].

[158] Acrording to the ECOTEC study (ECOTEC 2001) these indirect jobs include, for example, jobs in supplying electricity to the eco-industry, as well as jobs in a range of other industries that supply (non-environmental)

The adopted EU legislation in pollution prevention or waste management could speed up the process of creating green jobs in Slovakia. However, there must be a balance between green jobs' creation and environmental sustainability. For instance, biomass projects for energy production from the wooden chips and various wood waste from the timber industry could be extremely beneficial if implemented in a sustainable way and do not lead to overexploitation of the natural resources.

Another important issue is the quality of the jobs. From the perspective of addressing marginalized communities, the most important employment opportunities are for low-skill workers. Experience shows that waste management could be (besides organic agriculture and renewable energy) a very important area.[159] However, there are two aspects to be considered in respect to the Roma minority. This occupation is stigmatised and may reinforce prejudices against Roma. The second problem is that the recycling business is increasingly dominated by larger companies led by non-Roma, which may follow patterns of other employers in the area and discriminate against Roma in the hiring process. Given the social situation of Roma (lack of financial capital to open businesses, no positive credit history for loans, real estate for mortgages, etc.) it is highly improbable that they could start such activities on their own without external assistance.

9.3.6.2. The role of the state in supporting employment generation

The role of the state is crucial. Besides setting the legislative framework for promotion of green employment opportunities (e.g., tax incentives or subsidies) it has other important tools. It could develop strategic guidelines, take the lead in their implementation and integrate a green employment perspective into sectoral plans and policies. Development of a longer term strategy for green jobs could be a first step. Such a strategy could bring together those who

goods and services to ensure that the environmental infrastructure remains fully operational (e.g. maintenance firms).

[159] A good example of joining economic, environmnetal, and social goals is the Re-use and Recycling European Union Social Enterprises (RREUSE), which is a network of national and social economy federations with activities in re-use and recycling. The member organisations of RREUSE operate in labour-intensive and low profit activity that is of little interest to the private sector but important environmentally and has brought back around 40,000 people into the labour force.

can create innovative new products and services based on natural resource savings and alterations with those who understand how best to market them and turn them into business opportunities. Besides vision, the strategy could have practical implications for other sectoral policies and guide reform of the agricultural policy or support development of a new energy bill that would be more favorable for the promotion of energy from renewable resources.

Strategies and policies (supported by financial instruments from the domestic budget and structural funds of the EU) could create an enabling environment and prompt the actions on different levels. It could lead to a better integration of synergies between the environment and employment into decision making. Such policy integration is needed from the top level of governmental subsidies for organic farmers with labor intensive, but environmentally friendly, production to practical decisions on housing construction in Leatanovce or in Rudňany employing energy efficient constructions and biomass heating.

9.3.6.3. Institutional backup of marginalized peoples' involvement in the job market

Investment in new economic activities and affiliated new employement opportunities will have little impact on marginalized groups unless formal and informal institutions are in place to ensure their ability to engage in these opportunities. Otherwise we may face a situation where development projects (e.g., green employment) will not reach those who need them most, simply because they will not penetrate the wall of social exclusion and racial prejudices.

Creation of small and medium enterprises or cooperatives combined with economic incentives to employ marginalized people could facilitate the integration of Roma into society, their empowerment and capacity development. In the end this would contribute to a more equal distribution of environmental benefits and harm. However, to ensure employment of Roma, the state and external agencies will need to create a system of positive affirmation. Tax incentives, guaranteed loans or grants may be provided on condition of employing a certain percentage of marginalized people. A new modified activation policy mechanism may be developed and implemented. There are many alternative ways to do this, yet first there is a need for consensus and political will.

9.3.7. Payment for environmental services

The concept of payment for environmental services (PES) is an innovative way to provide incentives for better management of natural resources, improve livelihoods for the rural poor, and set up a framework for sustainable financing of protected areas and landscape management. The basic principle is that those who provide environmental services should be compensated or paid for doing so. This is achieved through a variety of arrangements that transfer rewards from those who benefit from an environmental service to those who conserve, restore, and manage the natural ecosystems which provide it (Wunder 2005).

PES may have a variety of forms and include different agencies (e.g., business, NGOs, or governments), but the principal idea is to create a scheme whereby local communities, farmers or land use managers are paid for the services they deliver also for a broader community of people. Two criteria essential for the establishment of a PES program are targeting (whom to pay and for what) and the magnitude of the payments (Alix-Garcia *et al* 2004). There are many examples of working schemes from China, the US, Australia, Brazil and Colombia (WRI 2005; WWF 2006). Some examples include:

- Carbon sequestration – carbon polluting companies pay for tree planting and forest conservation at home country or abroad;
- Watershed management – lower watershed users pay the communities upstream for good land-use management practices, supplying them with a sufficient amount of fresh water (e.g., communities or industry downstream can be involved);
- Conservation of biodiversity – companies, governments, NGOs or consumers pay directly for conservation activities or production of goods in a way that does not damage biodiversity.

This is a relatively simple idea that is difficult to implement. It requires willingness to pay and sell, minimal transaction costs, defined property rights and, most of all, involved stakeholders and energy for the start-up. Given the fact that many villages are in the upstream watershed areas, often on the border of natural parks and protected areas, a PES scheme could provide financial input into the villages. If well developed and managed, PES could be common

ground for cooperation between Roma and non-Roma and improve the social situation of both groups.

9.3.8. Collaboration instead of competition

Access to natural resources and safe housing is affected by the strength or weakness of different groups in the villages, which in turn is influenced by pre-existing institutions, property rights and entitlement distribution, ethnicity and class. Access to natural resources is the key factor enhancing, but also prohibiting, development of Roma communities and plays a substantial role in their exposure to adverse environmental impacts and access to environmental benefits. As the research reveals, in the case of the Roma in eastern Slovakia we can speak about competing groups of Roma and non-Roma, where the weaker Roma are more prone to mistreatment and marginalization from the majority of non-Roma.

It is difficult to imagine faster progress in addressing cases of environmental injustice and preventing new ones without intervention of the state, business, NGOs and other external agencies. As I described in this chapter, there are ways to do this and the environment may be one of the cornerstones. Policies, programmes, and projects need to be focused on enhancement of the ethnic group of Roma, but this can not be successfully done without working with the non-Roma majority in the same time.

The cases covered in this research reveal how important is it to build bridges between these two communities and how we can not empower the minority without working with the majority population as well. Development of capacities (for both Roma and non-Roma) should be done through common projects and activities. Development projects could be a successful tool only if they involve both sides. They should be focused on integration and enable synergies instead of segregating the two groups.

9.4. ENVIRONMENTAL JUSTICE AND SUSTAINABLE DEVELOPMENT

The key concern is how to shift from separate tracks of poverty alleviation and environmental protection to addressing poverty through environmental management and addressing environmental injustice through poverty alleviation. Cases of environmental injustice are symptoms of marginalization, oppression or ignorance. The weaker position of Roma in villages prevents their communities from better protection against unequal treatment. Enhancement of the entitlement, capacities, and skills of the marginalized groups vis-à-vis systematic work with the stronger group of non-Roma is therefore the key challenge in addressing the present and preventing future cases of environmental injustice.

Environment is part of the problem, but it is also part of the solution. It is a limiting factor in communities' development while imposing an additional burden on their health, financial resources, and well-being. But it may also provide opportunities and chances for people affected by environmental injustice or to those at the bottom of society. The environment may provide jobs, enhance links and cooperation between the majority and minority through participation on the protection of common-pool resources, and provide a source of dignity and self-esteem for the people who protect and manage natural resources.

The problem is that environmental protection and poverty alleviation programs are often done in parallel by different people and agencies and for different target groups. Every program for nature protection and natural resource management could start with a social assessment of what it could potentially bring to marginalized communities. Every social policy or project may consider how to use the environment as a source of factors that could contribute to the capacity development of people from the area. This shift would require better connections, contacts, and interactions among people framing social, economic, and environmental policies and among people working with the marginalized communities. Both the environment and people could benefit from these interlinks. It would decrease pressure on the environment as a (mostly) illegal source of income and it would help to include marginalized groups in society.

Cases of environmental injustice may serve as the starting point for discussions on how to link poverty-reduction programs and projects with sound environmental policies and environmental management. Environmental protection is a common ground where the

interests of the poor and people who are better off can meet. There are opportunities to reduce poverty by improving the environment, but there are also deep and strong barriers in the form of institutional frameworks, needed resources, and missing capacities. A widespread change in approach would require the concentrated efforts of all involved stakeholders.

9.5. FURTHER RESEARCH

We do not know many aspects of interactions among social, economic, and environmental factors and their impact on the distribution of environmental benefits and harm. Further research on the deeper roots of environmental injustice is therefore needed. The Roma minority is an indicator of how successful a society is in integrating marginalized communities and people, and to what extent we are able to recognize these people and involve them in society. The minority is also an indicator of equality in the distribution of environmental benefits and harm.

It is necessary to develop a better understanding of how Roma communities, households, and extended families function internally and thus what changes need to take place within them. The first step could be ethnographic research on the environmental values of Roma in shantytowns, their perception of the environment and interactions between man and nature. How they perceive environmental threats and what their environmental values are is important to know for forming successful campaigns and lobbying for environmental justice.

Substantial research, followed by pilot projects, would be needed to explore the poverty-environment nexus and ways to address poverty through environmental management and the sustainable use of natural resources. Several opportunities for this were outlined in the text, but it would require further research to develop the best approaches and create an enabling policy and institutional environment.

Last but not least, data on pollution and impact assessment of unequal exposure to environmental threats are needed to better understand the scope and danger of environmental injustice. These data are needed not only for further research, but are equally important for awareness raising, capacity development, and policy lobbying on behalf of the endangered

communities. The data from such research should then be fed back to the community rather than "extracted" for the researchers' benefit only.

9.6. CONCLUSIONS

This research identified and analyzed cases of local disparities in the distribution of environmental benefits and harm. Patterns of environmental injustice were developed for its better description. The four patterns of unequal distribution of environmental benefits and harm identified in the research are: (i) exposure to hazardous waste and chemicals (settlements at contaminated sites); (ii) differentiated vulnerability to floods; (iii) differentiated access to potable water; and (iv) discriminatory waste management practices. The outcomes of the research do not suggest that the Roma are the only victims of the unequal distribution of environmental benefits and harm. Yet if you are Roma living in eastern Slovakia your chances of having a safe, clean, and healthy environment are lower than those of your non-Roma neighbors. If we look at the social and ethnic characteristics of the people affected by environmental injustice in more detail, we find that there are significant differences between the majority and minority population. Poverty and ethnic origin play the key role and Roma in eastern Slovakia are the group where these inequalities are present.

Two groups of research questions were set forth at the beginning of the research: (1) Can the situation in some of the Roma settlements be described as environmental injustice? If so, what are the forms and scope of the unequal treatment, and what are the impacts on the affected communities? If there are inequalities, then why? What are the social processes associated with the unequal distribution of environmental benefits and harm? (2) What steps can be taken to move towards a more just distribution of environmental benefits and harm?

The first question is relatively easier to answer than the second. The research was done on a sample of 35 Roma settlements in the territory of 34 villages. Thirty settlements were randomly chosen and five were included in the case study research based on previous indications of environmental conditions in the Roma settlements. Out of the 30 randomly selected settlements as many as 24 experienced at least one of the four types of unequal treatment. The most prevalent form is unequal access to potable water. The case studies

provided better insight into the scope of the unequal treatment, and the impacts on the affected communities. They also help to reveal deeper social processes behind the distribution of environmental benefits and harm.

I see cases of environment injustice as the outcome of a deep social division in the villages, where through social processes the weaker group (Roma) is barred from access to natural resources and a better environment by the stronger group of non-Roma. Three main motives influencing the decision of the majority towards selection of environmentally problematic places for the Roma settlements were: (i) Economic factors (price of the land/real estate value, commercial potential); (ii) Segregation and prejudice (proximity to the main village and racial prejudices/an effort to push Roma out of the main village), and (iii) Social factors (competition over resources). Environmental injustice is then a result of groups' competition on the local level, where nation-state economic, social, and environmental policies and their enforcement (or lack thereof) create an enabling environment for discrimination.

The disadvantaged position of Roma on the local level and their weak social capital creates vulnerability for the group and an inability to promote their interests and protect themselves against the harm vis-à-vis the stronger group of non-Roma. The critical environmental situations in Rudňany, Spišské Bystré, and other Roma settlements can not be understand as ad hoc extreme situations, but rather as outcomes of social processes in the communities in a context of nation-state policies. History matters, yet so do the present power relations on the local level and the policy framework in the country. At the same time, environmental injustice further deteriorates and weakens the Roma's social situation through different costs and impacts associated with the unequal distribution of environmental dangers.

Outlining and suggesting steps for a more just distribution of environmental benefits and harm is a more complicated question. I identified several fundamental shifts in understanding and addressing the Roma situation (and thus directly and/or indirectly environmental injustice). The key message is that the environment is not a solely negative factor in the communities' development. It may have as well positive functions in community strengthening and ethnic mobilization. Environmental injustice needs to be addressed together with poverty alleviation, since poverty and unequal treatment go hand in hand. Attempts and measures to address the Roma situation can not be effective unless the Roma and the majority population implement them jointly. As Mohai pointed out, the improvement of ecological attitudes and public

participation in ecological activities can play an important role in social integration and the strengthening of social cohesion (Mohai 1990). Therefore, environmental issues, due to their impact, which is rarely limited only to the minority population, may provide the common ground for cooperation, involvement and development.

Whenever there is positive development in the Roma settlements covered in this research it is because of the activities of external agencies and their programs and projects. Supporting organizations and networks are crucial for progress not only among the marginalized minority, but also in changing the attitudes of the majority. Yet for a durable change, the context also has to be changed. International (i.e., the EU) policies, national economic, social and environmental policies should foster an enabling environment. This means careful evaluation of all possible impacts from newly developed or already implemented policies and mitigation measures that avoid selective negative impacts on vulnerable groups in society. Environmental injustice is only a fragment of the problems imposed on the Roma in eastern Slovakia. At the same time it is an outcome of the complex nature of these problems. We can hardly avoid environmental injustice without addressing social and economic problems of the people or without integration of the people into society.

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APPENDIX A. QUESTIONNAIRE

KEY QUESTIONS FOR SEMI-STRUCTURED INTERVIEWS IN THE FIELD RESEARCH[160]

Environmental justice cases are context-specific; it is difficult to generalize. In different places – based on local conditions – I modified the questions in order to better reflect the local situation.

Critical areas of concern with regard to environmental justice included:

- How does ethnic and/or class affiliation affect access to natural resources?
- What are the Roma customary and legal rights to land and other access? Are Roma denied secure tenure to certain assets and are they allowed others?
- Are Roma and/or the poor particularly hurt by the degradation of natural resources, poor environmental services, or biological/chemical threats to human health?
- How do natural disasters (especially floods) and their aftermath affect Roma vs. non-Roma?
- To what extent do ethnic and/or class affiliation influence a "voice" in processes related to the distribution of natural resource entitlements?
- What are the landscape management, land-use plans and management practices in the areas inhabited by Roma and non-Roma?

(A) Questions to municipal council members, NGO activists, and other opinion leaders on the micro (i.e., village) level	***(B) Questions to members of vulnerable groups' exposed to environmental injustice***
A1.►How do the state social, economic and environmental policies influence local conditions, specifically, access to environmental benefits and harm? **A2.►**What are the distribution and type of entitlements and property rights to natural resources? **A3.►**What is the security of tenure and the impact on the utilization of resources based on affiliation to	**B1.►**What are the environmental conditions in the place you live in (e.g., soil quality, vegetation, and the access to potable water)? **B2.►**What are the environmental threats you think are influencing your well-being? **B3.►**How is the environment utilized as a source of income (e.g., mushrooms and other important sources of nutrition found in nature)?

[160] Some of the questions were inspired by the lists of questions and indicators appearing in two World Bank documents: "Poverty reduction strategies and environment: a review of 40 interim and full PRSPs" by Jan Bojo and Rama Chandra Reddy, World Bank Environment Department, December 2001 http://www.worldbank.org/participation/PRSPenvironment2001.doc. and the "*Poverty Reduction Strategy Sourcebook*" Volume 1, Core Techniques and Cross-Cutting Issues, Chapter 2.5 on Environment, pp. 386-387 by Jan Bojo, Julia Bucknall, Krik Hamilton, Nalin Kishor, Christiane Kraus, and Poonam Pillai at http://www.worldbank.org/poverty/strategies/chapters/environment/environ.htm [Consulted 9 September 2003].

different class and/or ethnic groups?	**B4.**►Resources and time spent/distance traveled for collecting potable water, firewood and trends over time?
A4.►Are there any changes in management and utilization of natural resources in the areas inhabited by the majority and the minority?	**B5.**►Are there conflicts in the use of natural resources?
A4.►Are there conflicts in the use of natural resources?	**B6.**►How is pollution of air and water linked to poor health? How is it related to the burden of disease, particularly key environment-related illness like diarrhea, respiratory infections, and malaria?
A5.►History of the settlement pattern – how were the Roma shantytowns set up, and why are they at the place now?	**B7.**►What are the distribution and type of entitlements and property rights to natural resources?
A6.►What is distribution of water sources?	**B8.**►What is the security of tenure?
A7.►What is frequency of floods, landslides and other environment-related disasters? What is the distribution of impacts from them?	**B9.**►Are there any changes in management and utilization of natural resources? Are there conflicts in the use of natural resources?
A8.►Are there any diarrhea and vector-borne diseases? Is there any health impact from exposure to toxic waste?	**B10.**►History of the settlement pattern – how the shantytowns were set up, and why they are at the place now?
A9.►What is access to safe water supply in the majority/minority?	**B11.**►What is distribution of water sources?
A10.►Is there any sanitation and how does it cover the majority/minority parts of the village?	**B12.**►What is frequency of floods, landslides and other environment-related disasters? What are their impacts?
A11.►How is the solid waste collected?	**B13.**►Are there any diarrhea and vector-borne diseases? Is there any health impact from exposure to toxic waste?
A12.►How is the solid waste managed after collection?	**B14.**►What is the access to a safe water supply? Is there any sanitation?
A13.►Are there any injuries/deaths caused by environmental conditions?	**B15.**►How is the solid waste collected? How is the solid waste managed after collection?
A14.►Are there conflicting claims over utilization of natural resources?	**B16.**►Are there any Injuries/deaths caused by environmental conditions?
A15.►What are the environmental conditions where the majority and minority live?	**B17.**►Are there conflicting claims over utilization of natural resources?
A16.►What are the housing conditions of the poor (and specifically of Roma)?	**B18.**►What are the housing conditions?
A18.►Are building codes enforced?	**B19.**►To what extent are you organized? What is the access of Roma to decision-making?
A19.►To what extent are local groups organized? What is composition of the local council? What is the access of Roma to decision-making?	**B20.**►What institutions do you use to manage access to natural resources?
A20.►What institutions do local communities use to manage access to natural resources?	**B21.**►What are your sources of information?
A21.►Do certain segments of the local community have a greater voice than others?	**B22.**►How do you evaluate work of the local NGOs,
A22.►To what extent are Roma men and women	

aware of their rights and of policies and legislation? **A23.►**What are their sources of information? **A24. ►**What are their links with local NGOs and government officials? **A25.►**Is there differentiated exposure to environmental threats and access to environmental benefits (and exposure to harm) between Roma and non-Roma?	municipality, and government? **B23.►**Do you feel discriminated against in your access to environmental benefits (and exposure to harm)?

APPENDIX B. RRA CHECKLIST FOR COMPARATIVE EVALUATION OF ROMA AND NON-ROMA SETTLEMENTS

Checklist for field research assessment of micro-level (i.e., village level) disparities in the distribution of environmental benefits and harm. Location and situation in Roma and non-Roma settlements were evaluated against each other.

ASPECTS	INDICATORS	RELATIVE EVALUATION (Comparison of Roma shantytown to majority village)
Housing	♦Legality (permission to register, property rights, permanent residence)	☐ same ☐ better ☐ worse
	♦Quality of construction (health and safety)	☐ same ☐ better ☐ worse
	♦Residential segregation (distance from the city/village)	☐ same ☐ better ☐ worse
	♦Level of air pollution	☐ same ☐ better ☐ worse
	♦Water quality	☐ same ☐ better ☐ worse
	♦Soil contamination	☐ same ☐ better ☐ worse
	♦Distance from environmental risks	☐ same ☐ better ☐ worse
	♦Categorization of the housing in land use plans and cadaster	☐ same ☐ better ☐ worse

	♦Heath records ♦Land ownership ♦Number of people per square meter ♦Access to recreational areas ♦Distance from transport infrastructure (railway, highway) ♦Security of the location (e.g., landslides, floods)	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Access to water	♦Distance to source/proximity ♦Availability and continuity throughout the year ♦Water quality (chemical/biological) ♦Number of taps per household ♦Guarantee of water as a public good	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Sanitation facilities	♦Access to waste water treatment (e.g., services, septic) ♦Access to canalization ♦Maintenance of sanitation ♦Quality of the waste water services	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse

Waste management	♦ Percentage of people served by waste collection ♦ Access to waste collection ♦ Number of waste/trash containers and bins ♦ Extent of illegal dumping ♦ Exposure to somebody else's waste dumps	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Fair share in infrastructure development	♦ Distribution of governmental/EU funds ♦ Investment policies ♦ Continuity of investment ♦ Access and participation in the decision-making process ♦ Accessibility of funds (obligations, rules, provisions) ♦ Distribution of investment into transport/water/electricity	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Access to representation	♦ Involvement of stakeholders (as defined by Agenda 21) into decision making ♦ Efficiency/efficacy ♦ Participation in elections	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
	♦ Accessibility of legal tools for defending interests ♦ Number of positive and negative court decisions	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse

Access to justice	♦Number and scope of policies/laws addressing particular and specific problems of those marginalized ♦Number of legal initiatives	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Access to information	♦Availability of information ♦Form of the information (e.g., targeted, tailored) ♦Compliment with Aarhus Convention provisions	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Exclusion from legal framework	♦Healthcare provision/access ♦Segregation of ownership ♦Exclusion from education	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Security	♦Law enforcement ♦Personal security	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Access to environmental education	♦Health related education level ♦Quality and focus of the environmental education	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Social capital	♦Capacity to formulate and defend own interests ♦Strength of formal and informal networks for participation in the decision-making process	❍ same ❍ better ❍ worse ❍ same ❍ better ❍ worse
Access to resources	♦Access to natural resources	❍ same ❍ better ❍ worse

	♦ Management over natural resources	❍ same ❍ better ❍ worse
Healthy environment	♦ Prevalence of diseases	❍ same ❍ better ❍ worse
	♦ Epidemics (number)	❍ same ❍ better ❍ worse
	♦ Birth defects/malformation	❍ same ❍ better ❍ worse
	♦ Level of vaccination	❍ same ❍ better ❍ worse
	♦ Access to heath services	❍ same ❍ better ❍ worse
	♦ Infant mortality	❍ same ❍ better ❍ worse
	♦ Life expectancy	❍ same ❍ better ❍ worse
	♦ Discrimination in health services	❍ same ❍ better ❍ worse

Source: Based on outcomes of the 1st Central and Eastern European Workshop on Environmental Justice (Budapest, December 2003).